

## SEQUENCE LISTING

<110> Henderson, Robert A.  
Wang, Tongtong  
Bangur, Chaitanya S.

<120> COMPOSITIONS AND METHODS FOR THE THERAPY  
AND DIAGNOSIS OF LUNG CANCER

<130> 210121.455C21

<140> US

<141> 2004-02-10

<160> 563

<170> FastSEQ for Windows Version 4.0

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<211> 315

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 236, 241

<223> n = A,T,C or G

<400> 1

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cagctgccgt gagactcccg atgtcacagg cagtctgtgt ggttacagcg cccctcagtg 120
ttcatctcca gcagagacaa cggaggaggc tcccaccagg acggttctca ttatttatat 180
gttaatatgt ttgtaaaactc atgtacagtt ttttttgggg gggaagcaat gggaanggta 240
naaattacaa atagaatcat ttgctgtaat ccttaaatgg caaacggtca ggccacgtga 300
aaaaaaaaaa aaaaaa                                     315
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<210> 2

<211> 380

<212> DNA

<213> Homo sapiens

<400> 2

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atttaggctt aagattttgt ttacccttgt tactaaggag caaattagta ttaaagtata 60
atatatataa acaaatacaa aaagttttga gtggttcagc ttttttattt tttttaatgg 120
cataactttt aacaacactg ctctgtaatg ggttgaactg tggtaactcag actgagataa 180
ctgaaatgag tggatgtata gtgttattgc ataattatcc cactatgaag caaagggact 240
ggataaattc ccagtctaga ttattagcct ttgttaacca tcaagcacct agaagaagaa 300
ttattggaaa ttttgtcctc tgtaactggc actttggggg gtgacttatc ttttgccttt 360
gtaaaaaaaa aaaaaaaaaa                                     380
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<210> 3  
 <211> 346  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 316, 317, 318, 322, 323, 326, 329, 330, 331, 336, 337, 339,  
 340, 342, 343  
 <223> n = A,T,C or G

<400> 3  
 ttgtaagtat acaatttttag aaaggattaa atgttattga tcattttact gaatactgca 60  
 catcctcacc atacaccatc cactttccaa taacatttaa tcctttctaa aattgtaagt 120  
 atacaattgt actttctttg gattttcata acaaatatac catagactgt taattttatt 180  
 gaagtttctt taatggaatg agtcattttt gtcttggtgt tttgaggtta cctttgcttt 240  
 gacttccaac aatttgatca tatagtgttg agctgtggaa atctttaagt ttattctata 300  
 gcaataattt ctattnnnag annccngggn naaaannann annaaa 346

<210> 4  
 <211> 372  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 297, 306, 332  
 <223> n = A,T,C or G

<400> 4  
 actagtctca ttactccaga attatgctct tgtacctgtg tggctggggt tcttagtcgt 60  
 tgggtttggt tggttttttg aactgggtat taggggtggt cacagttcta atgtaagcac 120  
 tctcttctcc aagttgtgct ttgtggggac aatcattctt tgaacattag agaggaaggc 180  
 agttcaagct gttgaaaaga ctattgctta tttttgtttt taaagaccta cttgacgtca 240  
 tgtggacagt gcacgtgctt tacgctacat cttgttttct aggaagaagg ggatgcnggg 300  
 aaggantggg tgctttgtga tggataaaac gnctaaataa cacaccttta cattttgaaa 360  
 aaaacaaaac aa 372

<210> 5  
 <211> 698  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 8, 345, 422, 430, 433, 436, 438, 472, 481, 486, 515, 521,  
 536, 549, 553, 556, 557, 559, 568, 593, 597, 605, 611, 613,  
 616, 618, 620, 628, 630, 632, 634, 635, 639, 643, 647, 648,  
 649, 652, 654, 658, 664, 690  
 <223> n = A,T,C or G

<400> 5  
 actagtanga tagaaacact gtgtcccgag agtaaggaga gaagctacta ttgattagag 60  
 cctaaccag gttaactgca agaagaggcg ggatactttc agctttccat gtaactgtat 120

```

gcataaagcc aatgtagtcc agtttctaag atcatgttcc aagctaactg aatccccactt 180
caatacacac tcatgaactc ctgatggaac aataacaggc ccaagcctgt ggtatgatgt 240
gcacacttgc tagactcaga aaaaatacta ctctcataaa tgggtgggag tattttgggt 300
gacaacctac ttgtcttggc tgagtgaagg aatgatattc atatnttcat ttattccatg 360
gacatttagt tagtgctttt tatataccag gcatgatgct gagtgacact cttgtgtata 420
tntccaaatn ttngtncngt cgctgcacat atctgaaatc ctatattaag antttcccaa 480
natgangtcc ctgggtttttc cagccactt gatcngtcaa ngatctcacc tctgtntgtc 540
ctaaaacct ctncnnang gttagacngg acctctcttc tcccttcccg aanaatnaag 600
tgtgngaaga nancncncn cccccctncn tncnncctng ccngctnnnc cncntgtngg 660
gggngccgcc cccgcggggg gacccccccn ttttcccc 698

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<210> 6

<211> 740

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 82, 406, 426, 434, 462, 536, 551, 558, 563, 567, 582, 584,  
592, 638, 651, 660, 664, 673, 675, 697, 706, 711, 715, 716,  
717, 723, 724, 725, 733

<223> n = A,T,C or G

<400> 6

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actagtcaaa aatgctaaaa taatttgga gaaaatattt ttaagtagt gttatagttt 60
catgtttatc ttttattatg tnttgtgaag ttgtgtcttt tcactaatta cctatactat 120
gccaatattt ccttatatct atccataaca tttatactac atttgtaaga gaatatgcac 180
gtgaaactta acactttata aggtaaaaat gaggtttcca agatttaata atctgatcaa 240
gttcttggtt tttccaaata gaatggactt ggtctgttaa ggggctaagg gagaagaaga 300
agataagggt aaaagttggt aatgaccaa cattctaaaa gaaatgcaa aaaaaattta 360
ttttcaagcc ttcgaactat ttaaggaaag caaaatcatt tcctanatgc atatcatttg 420
tgagantttc tcantaatc cctgaatcat tcatttcagc tnaggcttca tgttgactcg 480
atatgtcatc tagggaaagt ctatttcag gtccaaacct gttgccatag ttggttaggc 540
tttcccttaa ntgtgaanta ttnacangaa attttctctt tnanagttct tnatagggtt 600
aggggtgtgg gaaaagcttc taacaatctg tagtgtnccg tgttatctgt ncagaaccan 660
aatnacggat cgnangaagg actgggtcta tttacangaa cgaatnatct ngttnnntgt 720
gtnnncaact ccngggagcc 740

```

<210> 7

<211> 670

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 265, 268, 457, 470, 485, 546, 553, 566, 590, 596, 613, 624,  
639, 653, 659, 661

<223> n = A,T,C or G

<400> 7

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gctggggagc tcggcatggc ggtccccgct gcagccatgg ggccctcggc gttgggccag 60
agcgggcccc gctcgatggc cccgtggtgc tcagtgaaca gcggccccgc gcgctacgtg 120
cttgggatgc aggagctggt ccggggccac agcaagaccg cgagttcctg gcgcacagcg 180
ccaagggtgca ctcggtggcc tggagttgcg acggggcgtcg cctacctcgg ggtcttcgac 240

```

```

aagacgccac gtcttcttgc tgganaanga ccgttggtca aagaaaacaa ttatcgggga 300
catggggata gtgtggacca ctttgttggc atccaagtaa tcctgaccta tttgttacgg 360
cgtctggaga taaaaccatt cgcactctggg atgtgaggac tacaaaatgc attgccactg 420
tgaacactaa aggggagaac attaatatct gctggantcc tgatgggcan accattgctg 480
tagcnacaag gatgatgtgg tgacttttatt gatgccaaga aaccccgttc caaagcaaaa 540
aaacanttcc aanttcgaag tcaccnaaat ctcttggaac aatgaacatn aatatnttct 600
tcctgacaat ggnccctggg tgtntcacat cctcagctnc cccaaaactg aancctgtnc 660
natccacccc                                     670

```

```

<210> 8
<211> 689
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 253, 335, 410, 428, 448, 458, 466, 479, 480, 482, 483, 485,
488, 491, 492, 495, 499, 500, 502, 503, 512, 516, 524, 525,
526, 527, 530, 540, 546, 550, 581, 593, 594, 601, 606, 609,
610, 620, 621, 622, 628, 641, 646, 656, 673
<223> n = A,T,C or G

```

```

<400> 8
actagtatct aggaatgaac agtaaaagag gagcagttgg ctacttgatt acaacagagt 60
aatgaagta ctggatttgg gaaaacctgg ttttattaga acatatggaa tgaaagccta 120
cacctagcat tgccacttta gccccctgaa ttaacagagc ccaattgaga caaacccctg 180
gcaacaggaa attcaaggga gaaaaagtaa gcaacttggg ctaggatgag ctgactccct 240
tagagcaaag ganagacagc ccccatcacc aaataccatt tttgcctggg gcttgtgcag 300
ctggcagtggt tcctgccccg gcatggcacc ttatngtttt gatagcaact tcgttgaatt 360
ttcaccaact tattacttga aattataata tagcctgtcc gtttgctgtg tccaggctgt 420
gatatatntt cctagtgggt tgacttttnaa aataaatnag gtttantttt ctccccccnn 480
cnntnctncc nntcnctcnn cnntcccccc cncctngtcc tccnnnnttn gggggggccn 540
ccccncgggn ggacccccct ttggtccttt agtggagggt natggcccct ggnnttatcc 600
nggccttann tttccccgtn nnaaatgntt cccctccca ntccnccac ctcaanccgg 660
aagcctaagt ttntaccctg ggggtcccc                                     689

```

```

<210> 9
<211> 674
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 602, 632, 639, 668
<223> n = A,T,C or G

```

```

<400> 9
gtccactctc ctttgagtgt actgtcttac tgtgcactct gtttttcaac tttctagata 60
taaaaaatgc ttgttctata gtggagtaag agctcacaca cccaaggcag caagataact 120
gaaaaaagcg aggctttttt gccaccttgg taaaggccag ttcactgcta tagaactgct 180
ataagcctga aggggaagtag ctatgagact ttccattttt cttagtcttc ccaataggct 240
ccttcatgga aaaaggcttc ctgtaataat tttcacctaa tgaattagca gtgtgattat 300
ttctgaaata agagacaaat tgggcccagc agtcttcctg tgatttaaaa taaacaaccc 360
aaagttttgt ttggtcttca ccaaaggaca tactctaggg ggtatgttgt tgaagacatt 420

```

```

caaaaacatt agctgttctg tctttcaatt tcaagttatt ttggagactg cctccatgtg 480
agttaattac tttgctctgg aactagcatt attgtcatta tcatcacatt ctgtcatcat 540
catctgaata atattgtgga tttccccctc tgcttgcac tttttttgac tcctctggga 600
anaaatgtca aaaaaaaagg tcgatctact cngcaaggnc catctaata ca ctgcgctgga 660
aggaccnct gcc 674

```

```

<210> 10
<211> 346
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 320, 321, 322, 325, 326, 328, 329, 330, 332, 333, 334, 335,
342
<223> n = A,T,C or G

```

```

<400> 10
actagtctgc tgatagaaag cactatacat cctattgttt ctttctttcc aaaatcagcc 60
ttctgtctgt aacaaaaatg tactttatag agatggagga aaagggtctaa tactacatag 120
ccttaagtgt ttctgtcatt gttcaagtgt attttctgta acagaaacat atttggaatg 180
tttttctttt ccccttataa attgtaattc ctgaaatact gctgctttaa aaagtccac 240
tgtcagatta tattatctaa caattgaata ttgtaaata acttgtctta cctctcaata 300
aaagggtact tttctattan nnagnngnnn gnnnnataaa anaaaa 346

```

```

<210> 11
<211> 602
<212> DNA
<213> Homo sapiens

```

```

<400> 11
actagtaaaa agcagcattg ccaaataatc cctaattttc cactaaaaat ataatgaaat 60
gatgttaagc tttttgaaa gtttaggtta aacctactgt tgtagatta atgtatttgt 120
tgcttccctt tatctggaat gtggcattag cttttttatt ttaaccctct ttaattctta 180
ttcaattcca tgacttaagg ttggagagct aaacactggg atttttggat aacagactga 240
cagttttgca taattataat cggcattgta catagaaagg atatggctac cttttgttaa 300
atctgcactt tctaaatc aaaaaaggga aatgaagtta taaatcaatt tttgtataat 360
ctgtttgaaa catgagtttt atttgcttaa tattagggct ttgccccttt tctgtaagtc 420
tcttgggata ctgtgtagaa ctgttctcat taaacaccaa acagttaagt ccattctctg 480
gtactagcta caaattcggg ttcatattct acttaacaat ttaaataaac tgaaatattt 540
ctagatggtc tacttctgtt catataaaaa caaaacttga tttccaaaaa aaaaaaaaaa 600
aa 602

```

```

<210> 12
<211> 685
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 170, 279, 318, 321, 322, 422, 450, 453, 459, 467, 468, 470,
473, 475, 482, 485, 486, 491, 498, 503, 506, 509, 522, 526,
527, 528, 538, 542, 544, 551, 567, 568, 569, 574, 576, 582,
587, 588, 589, 590, 592, 593, 598, 599, 603, 605, 608

```

<223> n = A,T,C or G

<221> misc\_feature

<222> 633, 634, 635, 644, 646, 648, 651, 655, 660, 662, 663, 672, 674, 675, 682, 683

<223> n = A,T,C or G

<400> 12

```
actagtcctg tgaaagtaca actgaaggca gaaagtgtta ggattttgca tctaattgttc 60
attatcatgg tattgatgga cctaagaaaa taaaaattag actaagcccc caaataagct 120
gcatgcattt gtaacatgat tagtagattt gaatatatag atgtagtatn ttgggtatct 180
aggtgtttta tcattatgta aaggaattaa agtaaaggac tttgtagttg tttttattaa 240
atatgcatat agtagagtgc aaaaatatag caaaaatana aactaaaggc agaaaagcat 300
tttagatatg ccttaatnta nnaactgtgc caggtggccc tcggaataga tgccaggcag 360
agaccagtgc ctgggtggtg cctccccttg tctgcccccc tgaagaactt ccctcacgtg 420
angtagtgcc ctgtaggtg tcacgtggan tantggganc aggccgnncn gtnanaagaa 480
ancanngtga nagtttcncc gtngangcng aactgtccct gngccnnnac gctcccanaa 540
cntntccaat ngacaatcga gtttcennnc tccngnaacc tngccgnnnn cnngcccnnc 600
cantntgnta accccgcgcc cggatcgctc tcnnntcgtt ctncncnaa ngggntttcn 660
cnnccgccgt cncnnccccg cnncc 685
```

<210> 13

<211> 694

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 503, 546, 599, 611, 636, 641, 643, 645, 656, 658, 662, 676, 679, 687

<223> n = A,T,C or G

<400> 13

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cactagtcac tcattagcgt tttcaatagg gctcttaagt ccagtagatt acgggtagtc 60
agttgacgaa gatctggttt acaagaacta attaaatgtt tcattgcatt tttgtaagaa 120
cagaataatt ttataaaatg tttgtagttt ataattgccg aaaataattt aaagacactt 180
tttctctgtg tgtgcaaagt tgtgtttgtg atccattttt tttttttttt taggacacct 240
gtttactagc tagctttaca atatgcaaaa aaaggatttc tccctgaccc catccgtggt 300
tcacctctt tccccccat gctttttgcc ctagtttata acaaaggaat gatgatgatt 360
taaaaagtag ttctgtatct tcagtatctt ggtcttcag aaccctcttg ttgggaaggg 420
gatcattttt tactggtcat ttcccttttg agtgtactac tttaacagat ggaaagaact 480
cattggccat ggaaacagcc gangtggttg gagccagcag tgcattggcag cgtccggcat 540
ctggcntgat tggctctggt gccgtcattg tcagcacagt gccatgggac atggggaana 600
ctgactgcac ngccaatggt tttcatgaag aatacngcat ncncngtgat cacgtnancc 660
angacgctat gggggnkana gggccanttg cttc 694
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<210> 14

<211> 679

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 29, 68, 83, 87, 94, 104, 117, 142, 145, 151, 187, 201, 211,

226, 229, 239, 241, 245, 252, 255, 259, 303, 309, 359, 387,  
 400, 441, 446, 461, 492, 504, 505, 512, 525, 527, 533, 574,  
 592, 609, 610, 618, 620, 626, 627, 633, 639, 645, 654  
 <223> n = A,T,C or G

<400> 14  
 cagccgcctg catctgtatc cagcgccang tcccgccagt cccagctgcg cgcgcccccc 60  
 agtcccgnac ccgttcggcc cangetnagt tagncctcac catnccggtc aaaggangca 120  
 ccaagtgcac caaataacct cngtnccgat ntaaattcat cttctggctt gccgggattg 180  
 ctgtccntgc cattggacta nggctccgat ncgactctca gaccanganc atcttcganc 240  
 naganactaa tnatnattnt tccagcttct acacaggagt ctatattctg atcggatccg 300  
 gcncctctnt gatgctgggt ggcttcctga gctgctgcgg ggctgtgcaa gaggcccant 360  
 gcatgctggg actgttcttc ggcttctct tggtgatatn cgccattgaa atacctgcgg 420  
 ccacttgagg atattccact ncgatnatgt gattaaggaa ntccacggag ttttacaagg 480  
 acacgtacaa cnacctgaaa accnnggatg anccccaccg ggaancnctg aangccatcc 540  
 actatgcgtt gaactgcaat ggtttggctg gggnccttga acaatttaac cncatacatc 600  
 tggccccann aaaggacntn ctcgannct tcnccgtgna attcngttct gatnccatca 660  
 cagaagtctc gaacaatcc 679

<210> 15  
 <211> 695  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 105, 172, 176, 179, 189, 203, 212, 219, 221, 229, 231, 238,  
 242, 261, 266, 270, 278, 285, 286, 298, 311, 324, 337, 350,  
 363, 384, 391, 395, 405, 411, 424, 427, 443, 448, 453, 455,  
 458, 463, 467, 470, 479, 482, 484, 493, 499, 505, 518  
 <223> n = A,T,C or G

<221> misc\_feature  
 <222> 520, 523, 531, 540, 584, 595, 597, 609, 611, 626, 628, 651,  
 652, 657, 661, 665, 669, 672, 681, 683, 691, 693  
 <223> n = A,T,C or G

<400> 15  
 actagtggat aaaggccagg gatgctgctc aacctcctac catgtacagg gacgtctccc 60  
 cattacaact acccaatccg aagtgtcaac tgtgtcagga ctaanaaacc ctgggttttga 120  
 ttaaaaaagg gcctgaaaaa aggggagcca caaatctgtc tgcttcctca cnttantcnt 180  
 tggcaaatna gcattctgtc tcnttggctg cngcctcanc ncaaaaaanc ngaactcnat 240  
 cngggccagg aatacatctc ncaatnaacn aaattganca aggcnnntggg aaatgccnga 300  
 tgggattatc ntccgcttgt tgancctcta agtttcttc ccttcattcn accctgccag 360  
 ccnagttctg ttagaaaaat gccngaattc naacnccggt tttctactc ngaatttaga 420  
 tctncanaaa ctctctggcc acnattcnaa ttnanggnca cgnacanatn ccttccatna 480  
 ancncacccc acntttgana gccangacaa tgactgcntn aantgaaggc ntgaaggaan 540  
 aactttgaaa ggaaaaaaa ctttgtttcc ggcccttcc aacncttctg tgttnancac 600  
 tgccttctng naacctgga agcccnnga cagtgttaca tgttgttcta nnaaacngac 660  
 ncttnaatnt cnatcttccc nanaacgatt ncnc 695

<210> 16  
 <211> 669  
 <212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 299, 354, 483, 555, 571, 573, 577, 642, 651, 662, 667

<223> n = A,T,C or G

<400> 16

```
cgccgaagca gcagcgcagg ttgtccccgt ttccccctcc ccttcccttc tccggttgcc 60
ttcccgggcc ctttacctc cacagtcccc gtcccgccat gtcccagaaa caagaagaag 120
agaaccctgc ggaggagacc ggcgaggaga agcaggacac gcaggagaaa gaagggtattc 180
tgcctgagag agctgaagag gcaaagctaa aggccaaata cccaagccta ggacaaaagc 240
ctggaggctc cgacttcctc atgaagagac tccagaaagg gcaaaagtac tttgactcng 300
gagactacaa catggccaaa gccaacatga agaataagca gctgccaagt gcangaccag 360
acaagaacct ggtgactggt gatcacatcc ccaccccaca ggatctgccc agagaaaagt 420
ctcgctcgtc accagcaagc ttgctgggtg ccaagttgaa tgatgctgcc ggggctctgc 480
canatctgag acgttccctt ccttgcctcc cccgggtcct gtgctggctc ctgcccttcc 540
tgcttttgca gccangggtc aggaagtggc ncnggtngtg gctggaaaagc aaaacccttt 600
cctgttggtg tcccacccat ggagcccctg gggcgagccc angaacttga ncctttttgt 660
tntcttnc 669
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<210> 17

<211> 697

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 33, 48, 50, 55, 59, 60, 76, 77, 78, 90, 113, 118, 130, 135,  
141, 143, 150, 156, 166, 167, 170, 172, 180, 181, 190, 192,  
194, 199, 201, 209, 212, 224, 225, 226, 230, 233, 234, 236,  
242, 244, 251, 253, 256, 268, 297, 305, 308, 311, 314

<223> n = A,T,C or G

<221> misc\_feature

<222> 315, 317, 322, 324, 327, 333, 337, 343, 362, 364, 367, 368,  
373, 384, 388, 394, 406, 411, 413, 423, 429, 438, 449, 450,  
473, 476, 479, 489, 491, 494, 499, 505, 507, 508, 522, 523,  
527, 530, 533, 535, 538, 539, 545, 548, 550, 552, 555

<223> n = A,T,C or G

<221> misc\_feature

<222> 562, 563, 566, 568, 572, 577, 578, 580, 581, 591, 594, 622,  
628, 632, 638, 642, 644, 653, 658, 662, 663, 665, 669, 675,  
680, 686, 689

<223> n = A,T,C or G

<400> 17

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gcaagatatg gacaactaag tgagaaggta atnctctact gctctagntn ctccnggcnn 60
gacgcgctga ggagannnac gctggcccan ctgccggcca cacacgggga tcntggtnat 120
gectgcccan gggancccca ncnctcggan ccatntcac acccgnnccn tncgcccacn 180
ncctggctcn cnnggccng nccagctcnc gnccccctcc gccnnnctcn ttnnentctc 240
cncnccctcc ncnacnacct cctaccncg gctccctccc cagccccccc ccgcaancct 300
ccacnacnc ntcnnncga ancnccnctc gcnctcngcc ccngccccct gccccccgcc 360
```

```

cncnacnncg cgntcccccg cgcncgcngc ctncccccct cccacnacag ncnacccgc 420
agnacgcnc tccgcccnet gacgcccnn cccgcgcgc tcaccttcat ggncnacng 480
ccccgctcnc ncnctgcnc gccgncnng cgcgcgcgc cnnccgngtn ccncncgng 540
ccccngcngn angcngtgcg cnnangncc gngccgncn ncacctccg ncnccgcgc 600
cgcccgctgg gggctcccgc cncgcggntc antcccncc cntncgcca ctntccgntc 660
cnnnctcnc gctcngcgn cgcncncnc cccccc 697

```

```

<210> 18
<211> 670
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 234, 292, 329, 437, 458, 478, 487, 524, 542, 549, 550, 557,
576, 597, 603, 604, 646, 665
<223> n = A,T,C or G

```

```

<400> 18
ctcgtgtgaa ggggtgcagta cctaagccgg agcggggtag aggcgggccc gcacccccctt 60
ctgacctcca gtgccgcgg cctcaagatc agacatggcc cagaacttga acgacttggc 120
gggacggctg cccgcgggc cccggggcat gggcacggcc ctgaagctgt tgctgggggc 180
cggcgcctg gcctacgggtg tgcgcgaatc tgtgttcacc gtggaaggcg ggncagagc 240
catcttcttc aatcggtatc gtggagtgc caggacacta tcctgggccc anggccttca 300
cttcaggatc cttggttcca gtacccanc atctatgaca ttccgggccag acctcgaaaa 360
aatctcctcc ctacaggctc caaagacctc agatgggtga atatctccct gcgagtgttg 420
tctcgaccaa tgctcangaa cttcctaaca tgttccancg cctaagggct ggactacnaa 480
gaacgantgt tgccgtccat tgtcacgaag tgctcaagaa tttnggtggc caagttcaat 540
gncctcacnn ctgacnccc agcggggcca agttanccct ggttgatccc cgggganctg 600
acnnaaaagg gccaaaggact tcccctcatc ctggataatg tggcncac aaagctcaac 660
tttanccacc 670

```

```

<210> 19
<211> 606
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 506
<223> n = A,T,C or G

```

```

<400> 19
actagtcca acctcagctc ccaggccagt tctctgaatg tcgaggagtt ccaggatctc 60
tggcctcagt tgccttgggt tattgatggg ggacaaattg gggatggcca gagccccgag 120
tgtcgcttg gctcaactgt ggttgatttg tctgtgcccg gaaagtttg catcattcgt 180
ccaggctgtg ccctggaaag tactacagcc atcctccaac agaagtacgg actgctcccc 240
tcacatgcgt cctacctgtg aaactctggg aagcaggaag gcccaagacc tgggtgctgga 300
tactatgtgt ctgtccactg acgactgtca aggcctcatt tgcagaggcc accggagcta 360
gggcactagc ctgactttta aggcagtgtg tctttctgag cactgtagac caagcccttg 420
gagctgctgg ttagccttg cacctgggga aaggatgtat ttatttgtat tttcatatat 480
cagccaaaag ctgaatggaa aagttnagaa cattcctagg tggccttatt ctaataagtt 540
tcttctgtct gttttgttt tcaattgaaa agttattaaa taacagattt agaattcagt 600
gagacc 606

```

<210> 20  
 <211> 449  
 <212> DNA  
 <213> Homo sapiens

<400> 20  
 actagtaaac aacagcagca gaaacatcag tatcagcagc gtcgccagca ggagaatatg 60  
 cagcgccaga gccgaggaga acccccgcgc cctgaggagg acctgtccaa actcttcaaa 120  
 ccaccacagc cgccctgccag gatggactcg ctgctcattg caggccagat aaacacttac 180  
 tgccagaaca tcaaggagtt cactgcccac aacttaggca agctcttcac ggcccaggct 240  
 cttcaagaat acaacaacta agaaaaggaa gtttccagaa aagaagttaa catgaactct 300  
 tgaagtcaca ccagggcaac tcttggaaga aatatatttg catattgaaa agcacagagg 360  
 atttctttag tgtcattgcc gattttggct ataacagtgt ctttctagcc ataataaaat 420  
 aaaacaaaat cttgactgct tgctcaaaa 449

<210> 21  
 <211> 409  
 <212> DNA  
 <213> Homo sapiens

<400> 21  
 tatcaatcaa ctggtgaata attaaacaat gtgtggtgtg atcatacaaa ggggtaccact 60  
 caatgataaa aggaacaagc tgcctatatg tggaacaaca tggatgcatt tcagaaactt 120  
 tatgttgagt gaaagaacaa acacggagaa catactatgt ggttctcttt atgtaacatt 180  
 acagaaataa aaacagaggc aaccaccttt gaggcagtat ggagtggat agactggaaa 240  
 aaggaaggaa ggaaactcta cgctgatgga aatgtctgtg tcttcattgg gtggtagtta 300  
 tgtggggata tacatttgctc aaaattttatt gaactatata cttaaagaact ctgcatttta 360  
 ttgggatgta aataatacct caattaaaaa gacaaaaaaa aaaaaaaaaa 409

<210> 22  
 <211> 649  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 263, 353, 610, 635, 646  
 <223> n = A,T,C or G

<400> 22  
 acaattttca ttatcttaag cacattgtac atttctacag aacctgtgat tattctcgca 60  
 tgataaggat ggtacttgca tatggtgaat tactactgtt gacagtttcc gcagaaatcc 120  
 tatttcagtg gaccaacatt gtggcatggc agcaaagcc aacattttgt ggaatagcag 180  
 caaatctaca agagaccctg gttggttttt cgttttgttt tctttgtttt ttcccccttc 240  
 tcttgaatca gcagggatgg aangagggtg gggaagttat gaattactcc ttccagtagt 300  
 agctctgaag tgtcacattt aatatcagtt ttttttaaac atgattctag ttnaatgtag 360  
 aagagagaag aaagaggaag tgttcacttt ttttaatacac tgatttagaa atttgatgtc 420  
 ttatatcagt agttctgagg tattgatagc ttgctttatt tctgccttta cgttgacagt 480  
 gttgaagcag ggtgaataac taggggcata tatatttttt ttttttgtaa gctgtttcat 540  
 gatgttttct ttggaatttc cggataagtt caggaaaaca tctgcatgtt gttatctagt 600  
 ctgaagttn tatccatctc attacaacaa aaacnccag aacggnttg 649

<210> 23

<211> 669  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 642, 661  
 <223> n = A,T,C or G

<400> 23  
 actagtgcg tactggctga aatccctgca ggaccaggaa gagaaccagt tcagactttg 60  
 tactctcagt caccagctct ggaattagat aaattccttg aagatgtcag gaatgggatc 120  
 tatcctctga cagccttttg gctgcctcgg cccagcagc cacagcagga ggaggtgaca 180  
 tcacctgtcg tgccccctc tgtcaagact ccgacacctg aaccagctga ggtggagact 240  
 cgcaaggtgg tgctgatgca gtgcaacatt gagtcggtgg aggagggagt caaacaccac 300  
 ctgacacttc tgctgaagtt ggaggacaaa ctgaaccggc acctgagctg tgacctgatg 360  
 ccaaagtaga atatccccga gttggcggct gagctggtgc agctgggctt cattagttag 420  
 gctgaccaga gccggttgac ttctctgcta gaagagactt gaacaagttc aattttgcc 480  
 ggaacagtac cctcaactca gccgctgtca ccgtctctc ttagagctca ctcgggccag 540  
 gccctgatct gcgctgtggc tgtcctggac gtgctgcacc ctctgtcctt cccccagtc 600  
 agtattacct gtgaagccct tccctccttt attattcagg anggctggg gggctccttg 660  
 nttctaacc 669

<210> 24  
 <211> 442  
 <212> DNA  
 <213> Homo sapiens

<400> 24  
 actagtacca tcttgacaga ggatacatgc tcccaaaacg tttgttacca cacttaaaaa 60  
 tcaactgcat cattaagcat cagtttcaaa attatagcca ttcatgatct actttttcca 120  
 gatgactatc attattctag tcctttgaat ttgtaagggg aaaaaaaaca aaaacaaaaa 180  
 cttacgatgc acttttctcc agcacatcag atttcaaatt gaaaattaaa gacatgctat 240  
 ggtaatgcac ttgctagtac tacacacttt ggtacaacaa aaaacagagg caagaaacaa 300  
 cggaaagaga aaagccttcc tttgttgccc cttaaactga gtcaagatct gaaatgtaga 360  
 gatgatctct gacgatacct gtatgttctt attgtgtaaa taaaattgct ggtatgaaat 420  
 gacctaataa aaaaaaaga aa 442

<210> 25  
 <211> 656  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 330, 342, 418, 548, 579, 608  
 <223> n = A,T,C or G

<400> 25  
 tgcaagtacc acacactgtt tgaattttgc acaaaaagtg actgtaggat caggtgatag 60  
 ccccggaatg tacagtgtct tgggtcacca agatgccttc taaaggctga cataccttgg 120  
 accctaattg ggcagagagt atagccctag cccagtgggtg acatgaccac tccctttggg 180  
 aggcttgagg tagaggggag tggatgtgt tttctcagtg gaagcagcac atgagtgggt 240  
 gacaggatgt tagataaagg ctctagttag ggtgtcattg tcatttgaga gactgacaca 300

```

ctcctagcag ctggtaaagg ggtgctggn gccatggagg anctctagaa acattagcat 360
gggctgatct gattacttcc tggcatcccg ctactttta tgggaagtct tattagangg 420
atgggacagt tttccatata cttgctgtgg agctctggaa cactctctaa atttccctct 480
attaaaaatc actgccctaa ctacacttcc tccttgaagg aatagaaatg gaactttctc 540
tgacatantt cttggcatgg ggagccagcc acaaatgana atctgaacgt gtccagggtt 600
ctcctganac tcatctacat agaattggtt aaaccctccc ttggaataag gaaaaa 656

```

```

<210> 26
<211> 434
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 395
<223> n = A,T,C or G

```

```

<400> 26
actagttcag actgccacgc caaccccaga aaatacccca catgccagaa aagtgaagtc 60
ctaggtgttt ccatctatgt ttcaatctgt ccatctacca ggcctcgca taaaaacaaa 120
acaaaaaaaaac gctgccaggt tttagaagca gttctggtct caaaaccatc aggatcctgc 180
caccagggtt cttttgaaat agtaccacat gtaaaaggga atttggcttt cacttcatct 240
aataactgaa ttgtcaggct ttgattgata attgtagaaa taagtagcct tctgttgtgg 300
gaataagtta taatcagtat tcatctcttt gttttttgtc actcttttct ctctaattgt 360
gtcatttgta ctgtttgaaa aatatttctt ctatnaaatt aaactaacct gccttaaaaa 420
aaaaaaaaaa aaaa 434

```

```

<210> 27
<211> 654
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 505, 533, 563, 592, 613, 635, 638
<223> n = A,T,C or G

```

```

<400> 27
actagtccaa cacagtcaga aacattgttt tgaatcctct gtaaaccaag gcattaatct 60
taataaacca ggatccattt aggtaccact tgatataaaa aggatatcca taatgaatat 120
tttatactgc atcctttaca ttagccacta aatacgttat tgcttgatga agacccttca 180
cagaatccta tggattgcag catttcactt ggctacttca taccatgcc ttaaagaggg 240
gcagtttctc aaaagcagaa acatgccgcc agttctcaag ttttcctcct aactccattt 300
gaatgtaagg gcagctggcc cccaatgtgg ggaggtccga acattttctg aattcccat 360
ttcttgttcg cggctaaatg acagtttctg tcattactta gattccgatc tttcccaaag 420
gtgttgattt acaaagaggc cagctaatag cagaaatcat gaccctgaaa gagagatgaa 480
attcaagctg tgagccaggc agganctcag tatggcaaag gtcttgagaa tcngccattt 540
ggtacaaaaa aaatttttaa gcntttatgt tataccatgg aaccatagaa anggcaaggg 600
aattgttaag aanaatttta agtgtccaga cccanaanga aaaaaaaaaa aaaa 654

```

```

<210> 28
<211> 670
<212> DNA
<213> Homo sapiens

```

<220>  
 <221> misc\_feature  
 <222> 101, 226, 274, 330, 385, 392, 397, 402, 452, 473, 476, 532,  
 534, 538, 550, 583, 595, 604, 613, 622, 643, 669  
 <223> n = A,T,C or G

<400> 28  
 cgtgtgcaca tactgggagg atttccacag ctgcacggtc acagccctta cggattgcc 60  
 ggaaggggcg aaagatatgt gggataaact gagaaaagaa nccaaaaacc tcaacatcca 120  
 aggcagctta ttogaactct gcggcagcgg caacggggcg gcgggggtccc tgctcccggc 180  
 gttcccgggtg ctctctggtgt ctctctcggc agcttttagcg acctgncttt cttctcgagc 240  
 gtggggccag ctccccccgc ggcgcccacc cacnctcact ccatgctccc ggaaatcgag 300  
 aggaagatca ttagttcttt ggggacgttn gtgattctct gtgatgctga aaaacactca 360  
 tataagggaat gtgggaaatc ctganctctt tnttatntcg tntgatttct tgtgttttat 420  
 ttgccaaaat gttaccaatc agtgaccaac cnagcacagc caaaaatcgg acntcngctt 480  
 tagtccgtct tcacacacag aataagaaaa cggcaaacc accccacttt tnantttnat 540  
 tattactaan ttttttctgt tgggcaaaag aatctcagga acngccctgg ggccnccgta 600  
 ctanagttaa ccnagctagt tncatgaaaa atgatgggct ccnctcaat gggaaagcca 660  
 agaaaaagnc 670

<210> 29  
 <211> 551  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 336, 474, 504, 511, 522, 523, 524, 540, 547  
 <223> n = A,T,C or G

<400> 29  
 actagtcttc cacagcctgt gaatccccct agacctttca agcatagtga gcggagaaga 60  
 agatctcagc gtttagccac cttacccatg cctgatgatt ctgtagaaaa ggtttcttct 120  
 ccctctccag ccaactgatg gaaagtattc tccatcagtt ctcaaaatca gcaagaatct 180  
 tcagtaccag aggtgcctga tgttgacat ttgccacttg agaagctggg accctgtctc 240  
 cctcttgact taagtcgtgg ttcagaagtt acagcaccgg tagcctcaga ttcctcttac 300  
 cgtaatgaat gtcccagggc agaaaaagag gatacncaga tgcttccaaa tccttcttcc 360  
 aaagcaatag ctgatgggaa gaggagctcc agcagcagca ggaatatcga aaacagaaaa 420  
 aaaagtgaat ttgggaagac aaaagctcaa cagcatttgg taaggagaaa aganaagatg 480  
 aggaaggaag agagaagaga gacnaagatc nctacggacc gnnncggaag aagaagaagn 540  
 aaaaaanaaa a 551

<210> 30  
 <211> 684  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 545, 570, 606, 657, 684  
 <223> n = A,T,C or G

<400> 30

```

actagttcta tctggaaaaa gcccggggtg gaagaagctg tggagagtgc gtgtgcaatg 60
cgagactcat ttcttggaag catccctggc aaaaatgcag ctgagtacaa ggttatcact 120
gtgatagaac ctggactgct ttttgagata atagagatgc tgcagtctga agagacttcc 180
agcacctctc agttgaatga attaatgatg gcttctgagt caactttact ggctcaggaa 240
ccacgagaga tgactgcaga tgtaatcgag cttaaaggga aattcctcat caacttagaa 300
ggtggtgata ttcgtgaaga gtcttcctat aaagtaattg tcatgccgac tacgaaagaa 360
aaatgcccc gttgttgga gtatacagcg ggagtcttca gatacactgt gtccctcgatg 420
tgcagaagtt gtcagtggga aaatagtatt aacagctcac tcgagcaaga accctcctga 480
cagtactggg ctagaagttt ggatggatta tttacaatat aggaaagaaa gccaaagaatt 540
aggtnatgag tggatgagta aatggtggan gatggggaat tcaaatacaga attatggaag 600
aagttnttcc tgttactata gaaaggaatt atgtttattt acatgcagaa aatatanatg 660
tgtggtgtgt accgtggatg gaan 684

```

```

<210> 31
<211> 654
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 326, 582, 651
<223> n = A,T,C or G

```

```

<400> 31
ggcgagaaaa ggaaccaata tttcagaaac aagcttaata ggaacagctg cctgtacatc 60
aacatcttct cagaatgacc cagaagttat catcgtggga gctggcgtgc ttggctctgc 120
tttggcagct gtgctttcca gagatggaag aaaggtgaca gtcattgaga gagacttaaa 180
agagcctgac agaatagttg gagaattcct gcagccgggt gggtatcatg ttctcaaaga 240
ccttggctct ggagatacag tggaaggtct tgatgccag gttgtaaatg gttacatgat 300
tcatgatcag ggaaagcaaa tcagangttc agattcctta ccctctgtca gaaaacaatc 360
aagtgcagag tggaagagct ttccatcacg gaagattcat catgagtctc cggaagcag 420
ctatggcaga gcccaatgca aagtttattg aagtggttgt gttacagtta ttagaggaag 480
atgatgttgt gatgggagtt cagtacaagg ataaagagac tgggagatat caaggaactc 540
catgctccac tgactgttgt tgcagatggg cttttctcca anttcaggaa aagcctggtc 600
tcaataaagt ttctgtatca ctcatcttgt tggcttctta tgaagaatgc nccc 654

```

```

<210> 32
<211> 673
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 376, 545, 627
<223> n = A,T,C or G

```

```

<400> 32
actagtgaag aaaaagaaat tctgatacgg gacaaaaatg ctcttcaaaa catcattctt 60
tatcacctga caccaggagt tttcattgga aaaggatttg aacctgggtg tactaacatt 120
ttaagacca cacaaggaag caaaatcttt ctgaaagaag taaatgatac acttctgggtg 180
aatgaattga aatcaaaaga atctgacatc atgacaacaa atggtgtaat tcatgttgta 240
gataaactcc tctatccagc agacacacct gttggaaatg atcaactgct ggaaatactt 300
aataaattaa tcaatacat ccaaattaag tttgttcgtg gtagcacctt caaagaaatc 360
cccgtgactg tctatnagcc aattattaaa aaatacacca aatcattga tgggagtgcc 420

```

```

tgtgggaaat aactgaaaa gagaccgaga agaacgaatc attacaggtc ctgaaataaa 480
atacctagga tttctactgg aggtggagaa acagaagaac tctgaagaaa ttgttacaag 540
aagangtccc aaggtcacca aattcattga aggtggtgat ggtctttatt tgaagatgaa 600
gaaattaaaa gacgcttcag ggagacnccc catgaaggaa ttgccagcca caaaaaaatt 660
cagggattag aaa 673

```

```

<210> 33
<211> 673
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 325, 419, 452, 532, 538, 542, 571, 600, 616, 651, 653, 672
<223> n = A,T,C or G

```

```

<400> 33
actagtattt tacttttctc cgcttcagaa ggtttttcag actgagagcc taagcatact 60
ggatctgttg tttcttttgg gtctcacctc atcagtgtgc atagtggcag aaattataaa 120
gaaggttgaa aggagcaggg aaaagatcca gaagcatgtt agttcgacat catcatcttt 180
tcttgaagta tgatgcatat tgcattatth tatttgcaaa ctaggaattg cagtctgagg 240
atcattttaga agggcaagtt caagaggata tgaagatttg agaacttttt aactattcat 300
tgactaaaaa tgaacattaa tgttnaagac ttaagacttt aacctgctgg cagtcccaaa 360
tgaaattatg caactttgat atcatattcc ttgatttaaa ttgggctttt gtgattgant 420
gaaactttat aaagcatatg gtcagttatt tnattaaaaa ggcaaaacct gaaccacctt 480
ctgcacttaa agaagtctaa cagtacaaat acctatctat cttagatgga tntatttntt 540
tntattttta aatattgtac tatttatggg nggtggggct ttcttactaa tacacaaatn 600
aatttatcat ttcaanggca ttctatttgg gtttagaagt tgattccaag nantgcatat 660
ttcgctactg tnt 673

```

```

<210> 34
<211> 684
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 414, 472, 480, 490, 503, 507, 508, 513, 523, 574, 575, 598,
659, 662, 675
<223> n = A,T,C or G

```

```

<400> 34
actagtttat tcaagaaaag aacttactga ttctctgttt cctaaagcaa gagtggcagg 60
tgatcagggc tgggttagca tccggttcc ttagtgcagc taactgcatt tgtcactgat 120
gaccaaggag gaaatcacta agacatttga gaagcagtgg tatgaacgtt cttggacaag 180
ccacagttct gagccttaac cctgtagttt gcacacaaga acgagctcca cctccccctt 240
ttcaggagga atctgtgcgg atagattggc tggacttttc aatggttctg ggttgcaagt 300
gggcaactgt atggctgggt atggagcggc cagccccagg aatcagagcc tcagccccgg 360
tgcctgggtt gaaggtacag gtgttcagca ccttcggaaa aagggcataa agtngtgggg 420
gacaattctc agtccaagaa gaatgcattg accattgctg gctatttgct tncctagtan 480
gaattggatn catttttgac cangatnntt ctncatgctt ttnttgcaat gaaatcaa 540
cccgcattat ctacaagtgg tatgaagtcc tgcnnccccc agagaggctg ttcaggcnat 600
gtcttccaag ggcagggtgg gttacaccat ttacctccc ctctcccccc agattatgna 660
cncagaagga atttntttcc tccc 684

```

<210> 35  
 <211> 614  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 17, 20, 152, 223, 267, 287, 304, 306, 316, 319, 321, 355,  
 365, 382, 391, 407, 419, 428, 434, 464, 467, 477, 480, 495,  
 499, 505, 515, 516, 522, 524, 527, 542, 547, 549, 567, 572,  
 576, 578  
 <223> n = A,T,C or G

<400> 35  
 actagtccaa cgcgttngcn aatattcccc tggtagccta cttccttacc cccgaatatt 60  
 ggtaagatcg agcaatggct tcaggacatg ggttctcttc tcctgtgatc attcaagtgc 120  
 tcaactgcac aagactggct tgtctcagtg tntcaacctc accagggctg tctcttggtc 180  
 cacacctcgc tcctgttagg tgcggtatga cagcccccat canatgacct tggccaagtc 240  
 acggtttctc tgtggtcaat gttggtnggc tgattggtgg aaagtanggt ggaccaaagg 300  
 aagncncgtg agcagncanc nccagttctg caccagcagc gcctccgtcc tactnggggtg 360  
 ttccngtttc tcctggccct gngtgggcta nggcctgatt cggaanattg cctttgcang 420  
 gaaggganga taantgggat ctaccaattg attctggcaa aacnatntct aagattnttn 480  
 tgctttatgt ggganacana tctanctctc atttnttgct gnanatnaca ccctactcgt 540  
 gntcgancnc gtcttcgatt ttcgganaca cnccantnaa tactggcggt ctgttggtta 600  
 aaaaaaaaaa aaaa 614

<210> 36  
 <211> 686  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 222, 224, 237, 264, 285, 548, 551, 628, 643, 645, 665, 674  
 <223> n = A,T,C or G

<400> 36  
 gtggctggcc cggttctccg cttctcccca tcccctactt tcctccctcc ctccctttcc 60  
 ctccctcgte gactgttgct tgctggtcgc agactccctg acccctccct caccctctcc 120  
 taacctcggt gccaccggat tgcccttctt ttctgtgtgc ccagcccagc cctagtgtca 180  
 gggcgggggc ctggagcagc ccgaggcact gcagcagaag ananaaaaga cagcagcaac 240  
 ctcagetcgc cagtcgggtc gctngettcc cgccgcattg caatnagaca gacgccgctc 300  
 acctgctctg ggcacacgcg acccgtgggt gatttggect tcagtggcat cacccttatg 360  
 ggtattttctt aatcagcgct tgcaaagatg gttaacctat gctacgccag ggagatacag 420  
 gagactggat tggaacattt ttgggggtcta aaggtctggt tggggtgcaa cactgaataa 480  
 ggatgccacc aaagcagcta cagcagctgc agatttcaca gcccaagtgt gggatgctgt 540  
 ctccagganat naattgataa cctggctcat aacacattgt caagaatgtg gatttcccca 600  
 ggatattatt atttgtttac cggggganag gataactgtt tcncntattt taattgaaca 660  
 aactnaaaca aaanctaagg aaatcc 686

<210> 37  
 <211> 681  
 <212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 7, 10, 11, 19, 25, 32, 46, 53, 77, 93, 101, 103, 109, 115,  
123, 128, 139, 157, 175, 180, 192, 193, 194, 212, 218, 226,  
227, 233, 240, 241, 259, 260, 267, 289, 296, 297, 298, 312,  
313, 314, 320, 325, 330, 337, 345, 346, 352, 353, 356

<223> n = A,T,C or G

<221> misc\_feature

<222> 382, 385, 400, 427, 481, 484, 485, 491, 505, 515, 533, 542,  
544, 554, 557, 560, 561, 564, 575, 583, 589, 595, 607, 619,  
628, 634, 641, 645, 658, 670

<223> n = A,T,C or G

<400> 37

```
gagacanaacn naacgtcang agaanaaaaag angcatggaa cacaanccag gncgatggc 60
caccttccca ccagcancca gcgcccccca gcngccccca ngncggang accangactc 120
cancctgnat caatctganc tctattcctg gcccatnctt acctcggagg tggangccgn 180
aaaggtcgca cnnncagaga agctgctgcc ancaccancc gcccnnccc tgncgggctn 240
nataggaaac tggtgaccnn gctgcanaat tcatacagga gcacgcgang ggcacnnnct 300
cacactgagt tnnngatgan gcctnaccan ggacctnccc cagcnnattg annacnggac 360
tgcgaggagaa ggaagacccc gnacnggatc ctggccgcn tgccaccccc ccacccttag 420
gattatnccc cttgactgag tctctgaggg gctaccgaa cccgcctcca ttccctacca 480
natnntgctc natcgggact gacangctgg ggatnggagg ggctatcccc cancatcccc 540
tnanaccaac agcnaangan natnggggct cccnngggtc ggngcaacnc tcctncccc 600
cggcgcnggc cttcggtgnt gtcctcctc aacnaattcc naaanggcgg gcccccnct 660
ggactcctcn ttgttccctc c 681
```

<210> 38

<211> 687

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 3, 30, 132, 151, 203, 226, 228, 233, 252, 264, 279, 306,  
308, 320, 340, 347, 380, 407, 429, 437, 440, 445, 448, 491,  
559, 567, 586, 589, 593, 596, 603, 605, 606, 609, 626, 639,  
655, 674, 682

<223> n = A,T,C or G

<400> 38

```
canaaaaaaaa aaaacatggc cgaaaccagn aagctgcgcg atggcgccac ggcccccttt 60
ctcccgccct gtgtccggaa ggtttccctc cgaggcgccc cggctcccgc aagcggagga 120
gagggcgagg cntgccgggg ccggagctca naggccctgg ggccgctctg ctctcccgcc 180
atcgcaaggg cggcgctaac cttaggcctc cccgcaaagg tcccnangc ggnggcggcg 240
gggggctgtg anaaccgcaa aaanaacgct gggcgcgcng cgaaccgctc caccgccgcg 300
aaggananac ttccacagan gcagcgcttc cacagccan agccacnttt ctagggtgat 360
gcaccccgat aagttcctgn cggggaagct caccgctgtc aaaaaanctc ttcgctccac 420
cggcgcacna agggggangan ggcangancc tgccgcccgc acaggctcatc tgatcacgtc 480
gcccgcctta ntctgctttt gtgaatctcc actttgttca accccacccg ccgttctctc 540
ctccttgccg cttcctctna ccttaanaac cagcttctc taccnatng tanttntct 600
```

```

gcnncnngtng aaattaattc ggtcncnccg aacctcttnc ctgtggcaac tgctnaaaga 660
aactgctgtt ctgnnttactg cngtccc 687

```

```

<210> 39
<211> 695
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 300, 401, 423, 429, 431, 437, 443, 448, 454, 466, 492, 515,
523, 524, 536, 538, 541, 552, 561, 566, 581, 583, 619, 635,
636, 641, 649, 661, 694
<223> n = A,T,C or G

```

```

<400> 39
actagtctgg cctacaatag tgtgattcat gtaggacttc tttcatcaat tcaaaacccc 60
tagaaaaacg tatacagatt atataagtag ggataagatt tctaacattt ctgggctctc 120
tgaccctctg gctagactgt ggaaagggag tattattata gtatacaaca ctgctgttgc 180
cttattagtt ataacatgat aggtgctgaa ttgtgattca caatttaaaa aactgtaat 240
ccaaactttt ttttttaact gtagatcatg catgtgaatg ttaatgttaa tttgttcaan 300
gttgttatgg gtagaaaaaa ccacatgcct taaaatttta aaaagcaggg cccaaactta 360
ttagtttaaa attaggggta tgtttccagt ttgttattaa ntggttatag ctctgtttag 420
aanaaatcna ngaacangat ttngaaantt aagntgacat tatttnccag tgacttggtta 480
atttgaaatc anacacggca ccttccgttt tggtnctatt ggnntttgaa tccaancngg 540
ntccaaatct tnttggaac ngtcnnttta acttttttac nanatcttat ttttttattt 600
tggaatggcc ctattttaang ttaaaagggg ggggnnccac naccattcnt gaataaaact 660
naatatatat ccttgggtccc ccaaaattta agng 695

```

```

<210> 40
<211> 674
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 403, 428, 432, 507, 530, 543, 580, 583, 591, 604, 608, 621,
624, 626, 639, 672
<223> n = A,T,C or G

```

```

<400> 40
actagtagtc agttgggagt gggtgctata ccttgacttc atttatatga atttccactt 60
tattaaataa tagaaaagaa aatcccgggtg cttgcagtag agttatagga cattctatgc 120
ttacagaaaa tatagccatg attgaaatca aatagtaaag gctgttctgg ctttttatct 180
tcttagctca tcttaataaa gtagtacact tgggatgcag tgcgtctgaa gtgctaata 240
gttgtaacaa tagcacaaat cgaacttagg atgtgtttct tctcttctgt gtttcgattt 300
tgatcaattc ttttaattttg ggaacctata atacagtttt cctattcttg gagataaaaa 360
ttaaattgat cactgatatt taagtcattc tgcttctcat ctnaatattc catattctgt 420
attagganaa antacctccc agcacagccc cctctcaaac cccacccaaa accaagcatt 480
tggaatgagt ctcctttatt tccgaantgt ggatgggtata acccatatcn ctccaatttc 540
tgnttgggtt ggggtattaat ttgaactgtg catgaaaagn ggnaatcttt nctttgggtc 600
aaantttncg gggttaatttg nctngncaaa tccaatttnc ttttaagggtg tctttataaa 660
atttgcattt cngg 674

```

<210> 41  
 <211> 657  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 243, 247, 251, 261, 267, 272, 298, 312, 315, 421, 432, 434,  
 501, 524, 569, 594, 607, 650  
 <223> n = A,T,C or G

<400> 41  
 gaaacatgca agtaccacac actgtttgaa ttttgacaaa aaagtgactg tagggatcag 60  
 gtgatagccc cggaatgtac agtgtcttgg tgcaccaaga tgccttctaa aggctgacat 120  
 accttggggac cctaattggg cagagagtat agccctagcc cagtgggtgac atgaccactc 180  
 cctttggggag gctgaagtta aagggaatgg tatgtgtttt ctcatggaag cagcacatga 240  
 atnggtnaca ngatgttaaa ntaaggntct antttgggtg tcttgtcatt tgaaaaantg 300  
 acacactcct ancanctggt aaaggggtgc tggaagccat ggaagaactc taaaaacatt 360  
 agcatgggct gatctgatta ctctctggca tcccgtcac ttttatggga agtcttatta 420  
 naaggatggg ananttttcc atatccttgc tgttggaact ctggaacact ctctaaattt 480  
 ccctctatta aaaatcactg nccttactac acttctcctc tganggaata gaaatggacc 540  
 tttctctgac ttagttcttg gcatggganc cagcccaaat taaaatctga cttntccggt 600  
 ttctcngaa ctacactact tgaattggta aaacctcctt tggaattagn aaaaacc 657

<210> 42  
 <211> 389  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 179, 317, 320  
 <223> n = A,T,C or G

<400> 42  
 actagtgtcg aggaatgtaa acaagtttgc tgggccttgc gagaactcac caggttgttt 60  
 cgatagctca cactcctgca ctgtgcctgt caccaggaa tgtctttttt aattagaaga 120  
 caggaagaaa acaaaaacca gactgtgtcc cacaatcaga aacctccgtt gtggcagang 180  
 ggccttcacc gccaccaggg tgtcccgcca gacagggaga gactccagcc ttctgaggcc 240  
 atcctgaaga attcctgttt gggggttgtg aaggaaaatc acccggtatt aaaaagatgc 300  
 tgttgcctgc ccgcgtngtn gggaaggagc tggtttcctg gtgaatttct taaaagaaaa 360  
 atattttaag ttaagaaaaa aaaaaaaaaa 389

<210> 43  
 <211> 279  
 <212> DNA  
 <213> Homo sapiens

<400> 43  
 actagtgaca agctcctggt cttgagatgt cttctcgtta aggagatggg ccttttggag 60  
 gtaaaggata aaatgaatga gttctgtcat gattcactat tctagaactt gcatgacctt 120  
 tactgtgtta gctctttgaa tgttcttgaa attttagact ttctttgtaa acaataata 180  
 tgtccttatc attgtataaa agctgttatg tgcaacagtg tggagatcct tgtctgattt 240  
 aataaaatac ttaaacactg aaaaaaaaaa aaaaaaaaaa 279

<210> 44  
 <211> 449  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 245, 256, 264, 266, 273, 281, 323, 325, 337, 393  
 <223> n = A,T,C or G

<400> 44  
 actagtagca tcttttctac aacgttaaaa ttgcagaagt agcttatcat taaaaaacia 60  
 caacaacaac aataacaata aatcctaagt gtaaatcagt tattctaccc cctaccaagg 120  
 atatcagcct gttttttccc ttttttctcc tgggaataat tgtgggcttc ttcccaaatt 180  
 tctacagcct ctttcctctt ctcatgcttg agcttccttg tttgcacgca tgcgttgtgc 240  
 aagantgggc tgtttngctt ggantnecgt ccnagtggaa ncatgcttc ccttgttact 300  
 gttggaagaa actcaaacct tcnancccta ggtgttncca ttttgtcaag tcatcactgt 360  
 atttttgtac tggcattaac aaaaaaagaa atnaaatatt gttccattaa actttaataa 420  
 aactttaaaa gggaaaaaaa aaaaaaaaaa 449

<210> 45  
 <211> 559  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 263  
 <223> n = A,T,C or G

<400> 45  
 actagtgtgg gggaatcacg gacacttaaa gtcaatctgc gaaataattc ttttattaca 60  
 cactcactga agtttttgag tcccagagag ccattctatg tcaaacattc caagtactct 120  
 ttgagagccc agcattacat caacatgccc gtgcagttca aaccgaagtc cgcaggcaaa 180  
 tttgaagctt tgcttgtcat tcaaacagat gaaggcaaga gtattgctat tcgactaatt 240  
 ggtgaagctc ttggaaaaaa ttnactagaa tactttttgt gttaagttaa ttacataagt 300  
 tgtattttgt taactttatc tttctacact acaattatgc ttttgtatat atattttgta 360  
 tgatggatat ctataattgt agattttgtt ttacaagct aatactgaag actcgactga 420  
 aatattatgt atctagccca tagtattgta cttaactttt acagggtgaa aaaaaaattc 480  
 tgtgtttgca ttgattatga tattctgaat aaatatggga atatatttta atgtgggtaa 540  
 aaaaaaaaaa aaaaaggaa 559

<210> 46  
 <211> 731  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 270, 467, 477, 502, 635, 660, 671, 688, 695, 697, 725  
 <223> n = A,T,C or G

<400> 46

```

actagttcta gtaccatggc tgtcatagat gcaaccatta tattccattt agtttcttcc 60
tcaggttccc taacaattgt ttgaaactga atatatatgt ttatgtatgt gtgtgtgttc 120
actgtcatgt atatggtgta tatgggatgt gtgcagtttt cagttatata tatattcata 180
tatacatatg catatatatg tataatatac atatatatcat gcatacactt gtataatata 240
catatatata cacatatatg cacacatatn atcactgagt tccaaagtga gtctttattt 300
ggggcaattg tattctctcc ctctgtctgc tcaactgggc tttgcaagac atagcaattg 360
cttgatttcc tttggataag agtcttatct tcggcactct tgactctagc cttaacttta 420
gatttctatt ccagaatacc tctcatatct atcttaaaac ctaaganggg taaagangtc 480
ataagattgt agtatgaaag antttgctta gttaaattat atctcaggaa actcattcat 540
ctacaaatta aattgtaaaa tgatggtttg ttgtatctga aaaaatgttt agaacaagaa 600
atgtaactgg gtacctgtta tatcaaagaa cctcnattta ttaagtctcc tcatagccan 660
atccttatat ngccctctct gacctgantt aatananact tgaataatga atagttaatt 720
taggnntggg c 731

```

```

<210> 47
<211> 640
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 5, 28, 106, 153, 158, 173, 176, 182, 189, 205, 210, 214,
225, 226, 229, 237, 260, 263, 269, 277, 281, 282, 322, 337,
338, 354, 365, 428, 441, 443, 456, 467, 476, 484, 503, 508,
554, 567, 575, 579, 588, 601, 606, 609, 611, 621, 636
<223> n = A,T,C or G

```

```

<400> 47
tgcgngccgg tttggccctt ctttgtanga cactttcatc cgccctgaaa tcttcccgat 60
cgtaataaac tcctcaggtc cctgcctgca cagggttttt tcttantttg ttgcctaaca 120
gtacacaaaa tgtgacatcc tttcaccaat atngattnct tcataccaca tcntcnatgg 180
anacgactnc aacaattttt tgatnaccn aaanactggg ggctnnaana agtacantct 240
ggagcagcat ggacctgtcn gcnactaang gaacaanagt nntgaacatt tacacaacct 300
ttggtatgtc ttactgaaag anagaaacat gcttctnncc ctgaccacg aggncaaccg 360
caganattgc caatgccaaag tccgagcggg tagatcaggg aatacattcc atggatgcat 420
tacatacntt gtccccgaaa nanaagatgc cctaanggct tcttcanact ggccngaaa 480
acanctacac ctggtgcttg ganaacanac tctttggaag atcatctggc acaagttccc 540
cccagtgagg tttnccttgg cacctanctt accanactna ttcggaancc attctttgcc 600
ntggcnttnt nttgggacca ntcttctcac aactgnaccc 640

```

```

<210> 48
<211> 257
<212> DNA
<213> Homo sapiens

```

```

<400> 48
actagtatat gaaaatgtaa atatcacttg tgtactcaaa caaaagttgg tcttaagctt 60
ccaccttgag cagccttgga aacctaacct gcctctttta gcataatcac attttctaaa 120
tgattttctt tgttcctgaa aaagtgattt gtattagttt tacatttggt ttttggaaga 180
ttatatttgt atatgtatca tcataaaata tttaaataaa aagtatcttt agagtgaaaa 240
aaaaaaaaa aaaaaaa 257

```

```

<210> 49
<211> 652

```

<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> 410, 428, 496, 571, 647  
<223> n = A,T,C or G

<400> 49  
actagttcag atgagtggct gctgaagggg ccccttgctc attttcatta taaccaatt 60  
tccacttatt tgaactctta agtcataaat gtataatgac ttatgaatta gcacagttaa 120  
gttgacacta gaaactgccc atttctgtat tacactatca aataggaaac attggaaaga 180  
tggggaaaaa aatcttattt taaaatggct tagaaagttt tcagattact ttgaaaattc 240  
taaacttctt tctgtttcca aaacttgaaa atatgtagat ggactcatgc attaagactg 300  
ttttcaaacg tttcctcaca tttttaaagt gtgattttcc ttttaataata catatttatt 360  
ttcttttaaag cagctatatc ccaacccatg actttggaga tatacctatn aaaccaatat 420  
aacagcangg ttattgaagc agctttctca aatgttgctt cagatgtgca agttgcaaat 480  
tttattgtat ttgtanaata caatttttgt tttaaactgt atttcaatct atttctccaa 540  
gatgcttttc atatagagtg aaatatccca ngataactgc ttctgtgtcg tcgcatttga 600  
cgcataactg cacaaatgaa cagtgtatac ctcttggttg tgcattnacc cc 652

<210> 50  
<211> 650  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> 237, 270, 311, 443, 454, 488, 520, 535, 539, 556, 567, 594, 603, 634  
<223> n = A,T,C or G

<400> 50  
ttgcgctttg attttttttag ggcttgtgcc ctgtttcact tatagggtct agaatgcttg 60  
tggtgagtaa aaaggagatg cccaatatc aaagctgcta aatgttctct ttgccataaa 120  
gactccgtgt aactgtgtga acacttgga tttttctcct ctgtcccgag gtcgtcgtct 180  
gctttctttt ttgggttctt tctagaagat tgagaaatgc atatgacagg ctgagancac 240  
ctcccaaac acacaagctc tcagccacan gcagcttctc cacagcccca gcttcgcaca 300  
ggctcctgga nggctgcctg ggggaggcag acatgggagt gccaagggtg ccagatgggt 360  
ccaggactac aatgtcttta tttttaactg tttgccactg ctgccctcac ccctgcccg 420  
ctctggagta ccgtctgccc canacaagtg ggantgaaat ggggggtggg gggaacactg 480  
attcccantt agggggtgcc taactgaaca gtagggatan aagggtgtgaa cctgngaant 540  
gctttttataa attatnttcc ttgttanatt tattttttta tttaatctct gttnaactgc 600  
ccngggaaaa ggggaaaaaa aaaaaaaaaa tctnttttaa cacatgaaca 650

<210> 51  
<211> 545  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> 66, 159, 195, 205, 214, 243, 278, 298, 306, 337, 366, 375, 382, 405, 446, 477, 492, 495, 503, 507, 508, 521, 537

<223> n = A,T,C or G

<400> 51

```

tggcgtgcaa ccagggtagc tgaagtttgg gtctgggact ggagattggc cattaggcct 60
cctganattc cagctccctt ccaccaagcc cagtcttgct acgtggcaca gggcaaacct 120
gactcccttt gggcctcagt tccccctccc ctcatgana tgaaaagaat actacttttt 180
cttgttggtc taacnttgct ggacncaaag tgtngtcatt attgttgat tggtgatgt 240
gtncaaaact gcagaagctc actgcctatg agaggaanta agagagatag tggatganag 300
ggacanaagg agtcattatt tggatatagat ccaccntcc caacctttct ctctcagtc 360
cctgcncctc atgtntctgg tntggtgagt cctttgtgcc accanccatc atgctttgca 420
ttgctgccat cctgggaagg gggtnatcg tctcacaact tgttgtcatc gtttganatg 480
catgctttct tnatnaaaca aanaaannaa tgtttgacag ngtttaaaat aaaaaanaaa 540
caaaa                                           545

```

<210> 52

<211> 678

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 98, 119, 121, 131, 136, 139, 140, 142, 143, 163, 168, 172,  
176, 184, 189, 190, 191, 200, 201, 205, 207, 221, 223, 229,  
230, 237, 240, 241, 255, 264, 266, 267, 276, 280, 288, 289,  
291, 297, 301, 306, 308, 314, 315, 326, 332, 335, 337

<223> n = A,T,C or G

<221> misc\_feature

<222> 339, 341, 343, 344, 345, 347, 350, 355, 356, 358, 362, 363,  
372, 379, 395, 397, 398, 400, 403, 412, 414, 421, 423, 431,  
435, 438, 439, 450, 457, 463, 467, 471, 474, 480, 483, 484,  
487, 490, 491, 492, 493, 499, 500, 504, 508, 518, 536

<223> n = A,T,C or G

<221> misc\_feature

<222> 538, 549, 551, 552, 554, 556, 557, 562, 563, 567, 571, 572,  
576, 579, 590, 592, 595, 598, 606, 609, 613, 620, 622, 624,  
626, 631, 634, 638, 641, 647, 654, 660, 661, 674

<223> n = A,T,C or G

<400> 52

```

actagtagaa gaactttgcc gcttttgtgc ctctcacagg cgcctaaagt cattgccatg 60
ggaggaagac gatttggggg gggagggggg gggggcangg tccgtggggc tttccctant 120
ntatctccat ntccantggn cnntgtcgcc tcttccctcg tcncattnga anttantccc 180
tggnccecn nccctctecn nccnccncc cccccctccg ncnccctecn cttttntan 240
ncttccccat ctccntcccc cctnanngtc ccaacnccgn cagcaatnnc ncaactnctc 300
netcncncc tcennccggtt cttctnttct cnacntntnc ncnntnccn tgccnntnaa 360
annctctccc cntgcaanc gattctctcc ctccnncnan ctntccactc cntnctctc 420
nncgctccct nttctcnc ccacctctcn ccttcgnccc cantacnctc nccnccctn 480
cgnntcnttn nnntcctcnn accncccncc tcccttcncc cctcttctcc ccggtntntc 540
tctctccncc nncnncncc cnnccntcc nngcgnccnt ttccgccccn cncnccntt 600
ccttctcnc cantccatcn cntntnccat nctnccncc nctcaenccc gctnccccn 660
ntctctttca cacngtcc                                           678

```

<210> 53  
 <211> 502  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 139, 146, 215, 217, 257, 263, 289, 386, 420, 452, 457, 461,  
 466, 482, 486  
 <223> n = A,T,C or G

<400> 53  
 tgaagatcct ggtgtcgcca tgggccgccc ccccgcccgt tgttaccggt attgtaagaa 60  
 caagccgtac ccaaagtctc gcttctgccg aggtgtccct gatgccaaaa ttcgcatttt 120  
 tgacctgggg cggaaaaaang caaaantgga tgagtctccg ctttgtggcc acatgggtgtc 180  
 agatcaatat gagcagctgt cctctgaagc cctgnangct gcccgaattt gtgccaataa 240  
 gtacatggta aaaagtngtg gcnaagatgc ttccatatcc ggggtgcggnt ccaccccttc 300  
 cacgtcatcc gcatcaacaa gatgttgtcc tgtgtcgggg ctgacaggct cccaacaggc 360  
 atgcgaagtg cttttggaaa acccanggca ctgtggccag ggttcacatt gggccaattn 420  
 atcatgttca tccgcaccaa ctgcagaaca angaacntgt naattnaagc cctgcccagg 480  
 gncaanttca aatttcccgg cc 502

<210> 54  
 <211> 494  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 431, 442, 445  
 <223> n = A,T,C or G

<400> 54  
 actagtccaa gaaaaatatg cttaatgtat attacaaagg ctttgtatat gttaacctgt 60  
 tttaatgccaa aaagtttgct ttgtccacaa tttccttaag acctcttcag aaagggattt 120  
 gtttgccctta atgaatactg ttgggaaaaa acacagtata atgagtgaaa agggcagaag 180  
 caagaaattt ctacatctta gcgactccaa gaagaatgag tatccacatt tagatggcac 240  
 attatgagga ctttaatctt tccttaaaca caataatgtt ttcttttttc ttttattcac 300  
 atgatttcta agtatatttt tcatgcagga cagtttttca accttgatgt acagtgactg 360  
 tggttaaattt ttctttcagt ggcaacctct ataatcttta aaatatgggtg agcatcttgt 420  
 ctgttttgaa ngggatatga cnatnaatct atcagatggg aaatcctgtt tccaagttag 480  
 aaaaaaaaaa aaaa 494

<210> 55  
 <211> 606  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 375, 395, 511, 542, 559, 569, 578, 581  
 <223> n = A,T,C or G

<400> 55

```

actagtaaaa agcagcattg ccaaataatc cctaattttc cactaaaaat ataatgaaat 60
gatgttaagc tttttgaaaa gtttaggtta aacctactgt tgtagatta atgtatttgt 120
tgcttccctt tatctggaat gtggcattag cttttttatt ttaaccctct ttaattctta 180
ttcaattcca tgacttaagg ttggagagct aaacactggg atttttggat aacagactga 240
cagttttgca taattataat cggcattgta catagaaagg atatggctac cttttgttaa 300
atctgcactt tctaaatata aaaaaaggga aatgaagtat aaatcaattt ttgtataatc 360
tgtttgaaac atgantttta tttgcttaat attanggctt tgcccttttc tgtagtctc 420
ttgggatcct gtgtaaaact gttctcatta aacaccaaac agttaagtcc attctctggt 480
actagctaca aattccgttt catattctac ntaacaattt aaattaactg aaatatttct 540
anatggtcta cttctgtcnt ataaaaacna aacttgantt nccaaaaaaa aaaaaaaaaa 600
aaaaaa                                           606

```

```

<210> 56
<211> 183
<212> DNA
<213> Homo sapiens

```

```

<400> 56
actagtatat ttaaacttac aggcttattt gtaatgtaaa ccaccatttt aatgtactgt 60
aattaacatg gttataatac gtacaatcct tccctcatcc catcacacaa ctttttttgt 120
gtgtgataaa ctgatttttg tttgcaataa aaccttgaaa aataaaaaaa aaaaaaaaaa 180
aaa                                           183

```

```

<210> 57
<211> 622
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 358, 368, 412, 414, 425, 430, 453, 455, 469, 475, 495, 499,
529, 540, 564, 575, 590
<223> n = A,T,C or G

```

```

<400> 57
actagtcact actgtcttct ccttgtagct aatcaatcaa tattcttccc ttgcctgtgg 60
gcagtggaga gtgctgctgg gtgtacgctg cacctgccca ctgagttggg gaaagaggat 120
aatcagtgag cactgttctg ctcagagctc ctgatctacc ccaccccta ggatccagga 180
ctgggtcaaa gctgcatgaa accaggccct ggcagcaacc tgggaatggc tggaggtggg 240
agagaacctg acttctcttt cctctccct cctccaacat tactggaact ctatcctgtt 300
agggatcttc tgagcttggt tccctgctgg gtgggacaga agacaaaagga gaagggangg 360
tctacaanaa gcagcccttc tttgtcctct ggggttaatg agcttgacct ananttcag 420
gaganaccan aagcctctga tttttaattt cntnaaatg tttgaagtnt atatntacat 480
atatatatat ctttnaatnt ttgagtcttt gatatgtctt aaaatccant ccctctgcn 540
gaaacctgaa ttaaaacat gaanaaaaaa gtttncctta aagatgttan taattaattg 600
aaacttgaaa aaaaaaaaaa aa                                           622

```

```

<210> 58
<211> 433
<212> DNA
<213> Homo sapiens

```

```

<400> 58
gaacaaattc tgattgggta tgtaccgtca aaagacttga agaaatttca tgattttgca 60

```

```

gtgtggaagc gttgaaaatt gaaagttact gcttttccac ttgctcatat agtaaagggga 120
tccttttcagc tgccagtgtt gaataatgta tcatccagag tgatgttatc tgtgacagtc 180
accagcttta agctgaacca ttttatgaat accaaataaa tagacctctt gtactgaaaa 240
catatttgtg actttaatcg tgctgcttgg atagaaatat ttttactggg tcttctgaat 300
tgacagtaaa cctgtccatt atgaatggcc tactgttcta ttatttggtt tgacttgaat 360
ttatccacca aagacttcat ttgtgtatca tcaataaagt tgtatgtttc aactgaaaaa 420
aaaaaaaaaa aaa 433

```

```

<210> 59
<211> 649
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 22, 190, 217, 430, 433, 484, 544, 550, 577, 583, 594
<223> n = A,T,C or G

```

```

<400> 59
actagttatt atctgacttt cngggtataa tcattctaata gagtgtgaag tagcctctgg 60
tgtcatttgg atttgcattt ctctgatgag tgatgctatc aagcaccttt gctggtgctg 120
ttggccatat gtgtatgttc cctggagaag tgtctgtgct gagccttggc ccacttttta 180
attaggcgtn tgtcttttta ttactgagtt gtaaganttc tttatatatt ctggattcta 240
gacccttatc agatacatgg ttgcaaata ttttctccca ttctgtgggt tgtgttttca 300
ctttatcgat aatgtcctta gacatataat aaatttgtat tttaaaagtg acttgatttg 360
ggctgtgcaa ggtgggctca cgcttgtaat ccagcactt tgggagactg aggtgggtgg 420
atcatatgan gangctagga gttcgaggtc agcctggcca gcatagcgaa aacttgcttc 480
tacnaaaaat acaaaaatta gtcaggcatg gtggtgcacg tctgtaatac cagcttctca 540
ggangctgan gcacaaggat cacttgaacc ccagaangaa gangttgcag tganctgaag 600
atcatgccag ggcaacaaaa atgagaactt gtttaaaaaa aaaaaaaaaa 649

```

```

<210> 60
<211> 423
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 209, 222, 277, 389, 398
<223> n = A,T,C or G

```

```

<400> 60
actagttcag gccttccagt tcactgacaa acatggggaa gtgtgcccag ctggctggaa 60
acctggcagt gataccatca agcctgatgt ccaaaagagc aaagaatatt tctccaagca 120
gaagtgagcg ctgggctgtt ttagtgccag gctgcggtgg gcagccatga gaacaaaacc 180
tcttctgtat ttttttttc cattagtana acacaagact cngattcagc cgaattgtgg 240
tgtcttacaa ggcagggtt tcctacaggg ggtgganaaa acagcctttc ttcctttggg 300
aggaatggcc tgagttggcg ttgtgggcag gctactggtt tgtatgatgt attagtagag 360
caaccatta atcttttcta gtttgtatna aacttganct gagaccttaa aaaaaaaaaa 420
aaa 423

```

```

<210> 61
<211> 423
<212> DNA

```

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 195, 285, 295, 329, 335, 340, 347, 367, 382, 383, 391, 396, 418

<223> n = A,T,C or G

<400> 61

```
cgggactgga atgtaaagtg aagttcggag ctctgagcac gggctcttcc cgccgggtcc 60
tccctcccca gacccagag ggagaggccc accccgcca gcccgcccc agcccctgct 120
caggtctgag tatggctggg agtcgggggc cacaggcctc tagctgtgct gctcaagaag 180
actggatcag ggtanctaca agtggccggg ccttgccttt gggattctac cctgttccta 240
at ttgggtgtt ggggtgcggg gtccctggcc cccttttcca cactncctcc ctccngacag 300
caacctccct tggggcaatt gggcctggnt ctcnccccgn tgttgcnaacc ctttgttggt 360
ttaaggnctt taaaaatgtt annttttccc ntgccngggt taaaaaagga aaaaactnaa 420
aaa 423
```

<210> 62

<211> 683

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 218, 291, 305, 411, 416, 441, 443, 453, 522, 523, 536, 542, 547, 566, 588, 592, 595, 603, 621, 628, 630, 632, 644, 645, 648, 655, 660, 672, 674, 676, 677, 683

<223> n = A,T,C or G

<400> 62

```
gctggagagg ggtacggact ttcttgaggt tgtcccaggt tggaatgaga ctgaactcaa 60
gaagagaccc taagagactg gggaatgggt cctgccttca ggaaagtga agacgcttag 120
gctgtcaaca cttaaaggaa gtccccttga agcccagagt ggacagacta gacccattga 180
tggggccact ggccatggtc cgtggacaag acattccngt gggccatggc acaccggggg 240
ggatcaaaat gtgtacttgt ggggtctcgc cccttgccaa aaccaaacca ntccactcc 300
tgtcnttgga ctttcttccc attccctcct ccccaaattgc acttcccctc ctccctctgc 360
ccctcctgtg tttttggaat tctgtttccc tcaaaattgt taatttttta nttttngacc 420
atgaacttat gtttggggtc nangttcccc ttnccaatgc atactaatat attaattggt 480
at ttattttt gaaatatttt ttaatgaact tggaaaaaat tnntggaatt tccttncttc 540
cntttntttt ggggggggtg gggggntggg ttaaaatttt tttggaancc cnatnggaaa 600
ttnttacttg gggccccctt naaaaaantn anttccaatt cttnnatngc ccctnttccn 660
ctaaaaaaaa ananannaaa aan 683
```

<210> 63

<211> 731

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 237, 249, 263, 288, 312, 317, 323, 326, 337, 352, 362, 370, 377, 400, 411, 414, 434, 436, 446, 457, 473, 486, 497, 498, 502, 512, 531, 546, 554, 563, 565, 566, 588, 597, 608, 611,

613, 615, 627, 632, 640, 641, 644, 654, 660, 663, 665

<223> n = A,T,C or G

<221> misc\_feature

<222> 671, 678, 692, 697, 698, 699, 704, 705, 712, 714, 717, 718,  
719, 723, 725, 730, 731

<223> n = A,T,C or G

<400> 63

```
actagtcata aaggggtgtgc gcgtcttcga cgtggcggtc ttggcgccac tgctgcgaga 60
cccggccctg gacctcaagg tcatccactt ggtgcgtgat cccgcgcggg tggcgagttc 120
acggatccgc tcgcgccacg gcctcatccg tgagagccta caggtggtgc gcagccgaga 180
ccgcgagctc accgcatgcc cttcttgag gccgcgggcc acaagcttgg cgccanaaa 240
gaaggcgtng ggggcccgca aantaccacg ctctgggagc tatggaangt cctcttgcaa 300
taatattggt tnaaaanctg canaanagcc cctgcancct cctgaactgg gntgcagggc 360
cncttacctn gtttgngtgc gggtacaaag aacctgtttn ggaaaaccct nccnaaaacc 420
ttccgggaaa attntncaaa ttttntttg ggaattnttg ggtaaaccct ccnaaaatgg 480
gaaacntttt tgccctnnaa antaaacat tnggttccgg gggccccccc ncaaaaccct 540
ttttntttt tttntgcccc cantnncccc ccggggcccc tttttttngg ggaaaanccc 600
ccccctncc nanantttta aaagggnggg anaatttttn nttncctccc gggncctccn 660
ggngntaaaa nggtttcncc ccccgaggg gnggggnnc ctcnnaaacc cntntcnna 720
ccncttttn n 731
```

<210> 64

<211> 313

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 240

<223> n = A,T,C or G

<400> 64

```
actagttgtg caaaccacga ctgaagaaag acgaaaagtg ggaaataact tgcaacgtct 60
gttagagatg gttgctacac atgttggtgc ttagagagaa catcttgagg agcagattgc 120
taaagttgat agagaatat aagaatgcat gtcagaagat ctctcggaat atattaaaga 180
gattagagat aagtatgaga agaaagctac tctaattaag tcttctgaag aatgaagatn 240
aaatgttgat catgtatata tatccatagt gaataaaatt gtctcagtaa agttgtaaaa 300
aaaaaaaaaa aaa 313
```

<210> 65

<211> 420

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 400, 402, 403, 404, 405, 406, 409, 411, 412, 414, 415, 416

<223> n = A,T,C or G

<400> 65

```
actagttccc tggcaggcaa gggcttccaa ctgaggcagt gcatgtgtgg cagagagagg 60
caggaagctg gcagtggcag cttctgtgtc tagggagggg tgtggctccc tccttccttg 120
```

```

tctgggaggt tggaggggaag aatctagggc ttagcttgcc ctctgccac cttccccctt 180
gtagatactg ccttaacact ccctcctctc tcagctgtgg ctgccacca agccagggtt 240
ctccgtgctc actaatttat ttccaggaaa ggtgtgtgga agacatgagc cgtgtataat 300
atttgtttta acattttcat tgcaagtatt gaccatcatc cttggttggtg tatcgttgta 360
acacaaatta atgatattaa aaagcatcca aacaaagccn annnnnaana nnannngaaa 420

```

```

<210> 66
<211> 676
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 328, 454, 505, 555, 586, 612, 636, 641
<223> n = A,T,C or G

```

```

<400> 66
actagtttcc tatgatcatt aaactcattc tcagggttaa gaaaggaatg taaatttctg 60
cctcaatttg tacttcatca ataagttttt gaagagtgcg gatttttagt cagggtctta 120
aaataaactc acaaatctgg atgcatttct aaattctgca aatgtttcct ggggtgactt 180
aacaaggaat aatcccacaa tatacctagc tacctaatac atggagctgg ggctcaaccc 240
actgttttta aggatttgcg cttacttggt gctgaggaaa aataagtagt tccgagggaa 300
gtagttttta aatgtgagct tatagatngg aaacagaata tcaacttaat tatggaaatt 360
gttagaaacc tgttctcttg ttatctgaat cttgattgca attactattg tactggatag 420
actccagccc attgcaaagt ctcagatata ttanctgtgt agttgaattc cttggaaatt 480
ctttttaaga aaaaattgga gtttnaaaga aataaacccc tttgttaaatt gaagcttggc 540
tttttggtga aaaaanaatca tcccgcaggg cttattgttt aaaaanggaa ttttaagcct 600
ccctggaaaa anttgttaat taaatgggga aaatgntggg naaaaattat ccgttagggg 660
ttaaagggaa aactta 676

```

```

<210> 67
<211> 620
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 419, 493, 519, 568, 605, 610
<223> n = A,T,C or G

```

```

<400> 67
caccattaaa gctgcttacc aagaacttcc ccagcatttt gacttccttg tttgatagct 60
gaattgtgag cagggtgatag aagagccttt ctagttgaac atacagataa tttgctgaat 120
acattccatt taatgaaggg gttacatctg ttacgaagct actaagaagg agcaagagca 180
taggggaaaa aaatctgac agaacgcac aaactcacat gtgccccctc tactacaaac 240
agattgtagt gctgtggtgg tttattccgt tgtgcagaac ttgcaagctg agtcactaaa 300
cccaaagaga ggaaattata ggtagttaa acattgtaat cccaggaact aagttaatt 360
cacttttgaa gtgttttggt ttttattttt ggttgctctg atttactttg ggggaaaang 420
ctaaaaaaa agggatatca atctctaatt cagtgccac taaaagtgtt ccctaaaaag 480
tctttactgg aanttatggg actttttaag ctccaggtnt tttggtcctc caaattaacc 540
ttgcatgggc cccttaaaat tggtgaangg cattcctgcc tctaagtttg gggaaaattc 600
ccccnttttn aaaatttgga 620

```

<210> 68  
 <211> 551  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 286, 464, 480, 501, 502, 518, 528, 533, 536, 537, 538, 539,  
 540, 541, 543, 544, 545, 547, 548, 549  
 <223> n = A,T,C or G

<400> 68  
 actagtagct ggtacataat cactgaggag ctatttctta acatgctttt atagaccatg 60  
 ctaatgctag accagtattt aagggtctaat ctcacacctc cttagctgta agagtctggc 120  
 ttagaacaga cctctctgtg caataacttg tggccactgg aaatccctgg gccggcattt 180  
 gtattggggg tgcaatgact cccaagggcc aaaagagtta aaggcacgac tgggatttct 240  
 tctgagactg tggtgaaact ccttccaagg ctgagggggg cagtangtgc tctgggaggg 300  
 actcggcacc actttgatat tcaacaagcc acttgaagcc caattataaa attgttattt 360  
 tacagctgat ggaactcaat ttgaaccttc aaaactttgt tagtttatcc tattatattg 420  
 ttaaacctaa ttacatttgt ctagcattgg atttgggtcc tgtngcatat gtttttttcn 480  
 cctatgtgct cccctcccc nnatcttaat ttaaaccnca attttgcnat tcnccnnnnn 540  
 nannnnanna a 551

<210> 69  
 <211> 396  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 235, 310, 323, 381  
 <223> n = A,T,C or G

<400> 69  
 cagaaatgga aagcagagtt ttcatttctg tttataaaacg tctccaaaca aaaatggaaa 60  
 gcagagtttt cattaaatcc ttttaccttt tttttttctt ggtaatcccc tcaaataaca 120  
 gtatgtggga tattgaatgt taaaggata tttttttcta ttatttttat aattgtacaa 180  
 aattaagcaa atgttaaaag ttttatatgc tttattaatg ttttcaaaag gtatnatata 240  
 tgtgatacat tttttaagct tcagttgctt gtcttctggt actttctggt atgggctttt 300  
 ggggagccan aaaccaatct acnatctctt tttgtttgcc aggacatgca ataaaattta 360  
 aaaaataaat aaaaactatt nagaaattga aaaaaa 396

<210> 70  
 <211> 536  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 388, 446, 455  
 <223> n = A,T,C or G

<400> 70  
 actagtgcga aagcaaatat aaacatcgaa aaggcggtcc tcacgttagc tgaagatatc 60

```

cttcgaaaga cccctgtaaa agagcccaac agtgaaaatg tagatatcag cagtggagga 120
ggcgtgacag gctggaagag caaatgctgc tgagcattct cctgttccat cagttgccat 180
ccactacccc gttttctctt cttgctgcaa aataaaccac tctgtccatt tttaactcta 240
aacagatatt ttgttttctc atcttaacta tccaagccac ctattttatt tggtctttca 300
tctgtgactg cttgctgact ttatcataat tttcttcaaa caaaaaaatg tatagaaaaa 360
tcatgtctgt gacttcattt ttaaagtnta cttgctcagc tcaactgcat ttcagttggt 420
ttatagtcca gttcttatca acattnaaac ctatngcaat catttcaaat ctattctgca 480
aattgtataa gaataaaagt tagaatttaa caattaaaaa aaaaaaaaaa aaaaaa 536

```

```

<210> 71
<211> 865
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 22, 35, 39, 56, 131, 138, 146, 183, 194, 197, 238, 269, 277,
282, 297, 316, 331, 336, 340, 341, 346, 349, 370, 376, 381,
382, 392, 396, 397, 401, 433, 444, 445, 454, 455, 469, 472,
477, 480, 482, 489, 497, 499, 511, 522, 526, 527
<223> n = A,T,C or G

```

```

<221> misc_feature
<222> 545, 553, 556, 567, 574, 580, 610, 613, 634, 638, 639, 663,
672, 689, 693, 694, 701, 704, 713, 723, 729, 732, 743, 744,
749, 761, 765, 767, 769, 772, 774, 780, 783, 788, 792, 803,
810, 824, 840, 848
<223> n = A,T,C or G

```

```

<400> 71
gacaaagcgt taggagaaga anagaggcag ggaanactnc ccaggcacga tggccncctt 60
cccaccagca accagcgccc cccaccagcc cccaggcccg gacgacgaag actccatcct 120
ggattaatct nacctctntc gcctgnccca ttcctacctc ggaggtggag gccggaaagg 180
tcncaccaag aganaantctg ctgccaaacac caaccgcccc agccctggcg ggcacganag 240
gaaactggtg accaatctgc agaattctna gaggaanaag cnaggggccc cgcgctnaga 300
cagagctgga tatgangcca gaccatggac nctacnccn ncaatncana cgggactgcg 360
gaagatggan gaccncgcac nngatcaggc cngctnncca nccccccacc cctatgaatt 420
attcccgcgt aangaatctc tgannggctt ccannaaagc gcctccccnc cnaacgnaan 480
tncaacatng ggattanang ctgggaactg naaggggcaa ancctnnaat atccccagaa 540
acaantcttc ccnaanaaac tggggcncct catnggtggn accaactatt aactaaaccg 600
cacgccaaag aantataaaa ggggggcccc tcncgggnng accccctttt gtcccttaat 660
ganggttatc cnccttgctg accatggtnc ccnnttctgt ntgnatgttt ccnctcccct 720
ccnctatnt cnagecgaac tcnnatttnc ccgggggtgc natchantng tnnccttttn 780
ttngttgncc cngccctttc cgnccgaacn cgtttccccg ttantaacgg caccgggggn 840
aagggtgntt ggccccctcc ctccc 865

```

```

<210> 72
<211> 560
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 83, 173, 183, 186, 209, 211, 215, 255, 321, 322, 323, 335,

```

344, 357, 361, 368, 394, 412, 415, 442, 455, 469, 472, 475,  
487, 513, 522, 528, 531, 534, 546

<223> n = A,T,C or G

<400> 72

```
cctggacttg tcttggttcc agaacctgac gacccggcga cggcgacgtc tcttttgact 60
aaaagacagt gtccagtgtc ccngcctagg agtctacggg gaccgcctcc cgcgccgccca 120
ccatgcccac cttctctggc aactggaaaa tcatccgata ggaaaacttc gangaattgc 180
tcnaantgct gggggtgaat gtgatgctna ngaanattgc tgtggctgca gcgtccaagc 240
cagcagtgga gatcnaacag gagggagaca ctttctacat caaaacctcc accaccgtgc 300
gcaccacaaa gattaacttc nnngttgggg aggantttga ggancaaact gtggatngga 360
ngcctgtnaa aacctggtga aatgggagaa tganaataaa atggtctgtg ancanaaaact 420
cctgaaagga gaaggccccc anaactcctg gaccngaaaa actgaccnc cnatngggga 480
actgatnctt gaacctgaa cgggcgggat ganccttttt tnttgccncc naanggggtc 540
tttcnntttc cccaaaaaaa
```

<210> 73

<211> 379

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 8, 17, 18, 21, 26, 29, 30, 32, 53, 56, 67, 71, 81, 102, 104,  
111, 112, 114, 119, 122, 124, 125, 134, 144, 146, 189, 190,  
214, 215, 219, 220, 235, 237, 246, 280, 288, 302, 310, 313,  
319, 322, 343, 353, 354

<223> n = A,T,C or G

<400> 73

```
ctggggancc ggcggtnnge nccatntcnn gncgcgaagg tggcaataaa aanccnctga 60
aaccgcncaa naaacatgcc naagatatgg acgaggaaga tngngctttc nngnacaanc 120
gnanngagga acanaacaaa ctcnangagc tctcaagcta atgccgcggg gaagggggccc 180
ttggccacnn gtggaattaa gaaatctggc aaanngtann tgttccttgt gcctnangag 240
ataagngacc ctttattttca tctgtattta aacctctctn ttccctgnca taacttcttt 300
tnccacgtan agntggaant anttggtgtc ttggactgtt gtncatttta gannaaactt 360
ttgttcaaaa aaaaaataa
```

<210> 74

<211> 437

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 145, 355

<223> n = A,T,C or G

<400> 74

```
actagttcag actgccacgc caaccccaga aaatacccca catgccagaa aagtgaagtc 60
ctaggtgttt ccatctatgt ttcaatctgt ccatctacca ggctctcgca taaaaacaaa 120
acaaaaaaac gctgccagggt tttanaagca gttctggtct caaaaccatc aggatcctgc 180
caccagggtt cttttgaaat agtaccacat gtaaaaggga atttggcttt cacttcatct 240
aatcactgaa ttgtcaggct ttgattgata attgtagaaa taagtagcct tctgttgtgg 300
```

```

gaataagtta taatcagtat tcattctcttt gttttttgtc actcttttct ctctnattgt 360
gtcatttgta ctgtttgaaa aatatttctt ctataaaatt aaactaacct gccttaaaaa 420
aaaaaaaaaa aaaaaaa 437

```

```

<210> 75
<211> 579
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 440, 513, 539, 551
<223> n = A,T,C or G

```

```

<400> 75
ctccgtcgcc gccaaagatga tgtgcggggc gccctccgcc acgcagccgg ccaccgccga 60
gaccagcac atcgccgacc aggtgaggtc ccagcttgaa gagaaagaaa acaagaagtt 120
ccctgtgttt aaggccgtgt cattcaagag ccaggtggtc gcggggacaa actacttcat 180
caaggtgcac gtggcgacg aggaacttct acacctgcga gtgttccaat ctctccctca 240
tgaaaacaag cccttgacct tatctaacta ccagaccaac aaagccaagc atgatgagct 300
gacctatttc tgatcctgac tttggacaag gcccttcagc cagaagactg acaaagtcac 360
cctccgtcta ccagagcgtg cacttgtgat cctaaaataa gcttcatctc cgggctgtgc 420
ccttgggggtg gaagggggcan gatctgcact gcttttgcat ttctcttctt aaatttcatt 480
gtgttgattc tttccttcca ataggtgatc ttnattactt tcagaatatt ttccaaatna 540
gatatatattt naaaatcctt aaaaaaaaaa aaaaaaaaaa 579

```

```

<210> 76
<211> 666
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 411, 470, 476, 491, 506, 527, 560, 570, 632, 636, 643, 650,
654, 658
<223> n = A,T,C or G

```

```

<400> 76
gtttatccta tctctccaac cagattgtca gctccttgag ggcaagagcc acagtatatatt 60
tccctgtttc ttccacagtg cctaataata ctgtggaact aggttttaaat aatttttttaa 120
ttgatgttgt tatgggcagg atggcaacca gaccattgtc tcagagcagg tgctggctct 180
ttcctggcta ctccatgttg gctagcctct ggtaacctct tacttattat cttcaggaca 240
ctcactacag ggaccaggga tgatgcaaca tccttgtctt tttatgacag gatgtttgct 300
cagcttctcc aacaataaaa agcacgtggt aaaacacttg cggatattct ggactgtttt 360
taaaaaatat acagtttacc gaaaatcata ttatcttaca atgaaaagga ntttatagat 420
cagccagtga acaacctttt cccaccatac aaaaattcct tttcccgaan gaaaanggct 480
ttctcaataa ncctcacttt cttaanatct tacaagatag ccccganac ttatcgaaac 540
tcatttttagg caaatatgan ttttattgtg cgttacttgt ttcaaaattt ggtattgtga 600
atatcaatta ccaccccat ctcccatgaa anaaanggga aanggtgaan ttcntaancg 660
cttaaa 666

```

```

<210> 77
<211> 396
<212> DNA

```

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 31, 54, 125, 128, 136, 163, 168, 198

<223> n = A,T,C or G

<400> 77

```
ctgcagcccg ggggatccac taatctacca nggttatttg gcagctaatt ctanatttgg 60
atcattgccc aaagttgcac ttgctggctc cttgggattt ggccttgga aggtatcata 120
catanganta tgccanaata aattccattt ttttgaaaat canctccntg gggctggttt 180
tggtccacag cataacangc actgcctcct tacctgtgag gaatgcaaaa taaagcatgg 240
attaagtgag aaggagact ctcagccttc agcttcctaa attctgtgtc tgtgactttc 300
gaagtTTTTT aaacctctga atttgtacac atttaaaatt tcaagtgtac tttaaaataa 360
aatacttcta atgggaacaa aaaaaaaaaa aaaaaa 396
```

<210> 78

<211> 793

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 309, 492, 563, 657, 660, 703, 708, 710, 711, 732, 740, 748, 758, 762, 765, 787

<223> n = A,T,C or G

<400> 78

```
gcatacctagc cgccgactca cacaaggcag gtgggtgagg aaatccagag ttgccatgga 60
gaaaattcca gtgtcagcat tcttgctcct tgtggccctc tcctacactc tggccagaga 120
taccacagtc aaacctggag ccaaaaagga cacaaggac tctcgacca aactgcccc 180
gaccctctcc agaggttggg gtgaccaact catctggact cagacatatg aagaagctct 240
atataaatcc aagacaagca acaaaccctt gatgattatt catcacttgg atgagtggcc 300
acacagtcna gctttaaaga aagtgtttgc tgaaaataaa gaaatccaga aattggcaga 360
gcagtttgtc ctctcaatc tggtttatga aacaactgac aaacaccttt ctctgatgg 420
ccagtatgtc ccaggattat gtttgttgac ccattcttga cagttgaagc cgatatcctg 480
ggaagatatt cnaaccgtct ctatgcttac aaactgcaga tacgctctgt tgcttgacac 540
atgaaaaagc tctcaagttg ctnaaaatga attgtaagaa aaaaaatctc cagccttctg 600
tctgtcggct tgaaaattga aaccagaaaa atgtgaaaaa tggctattgt ggaacanatn 660
gacacctgat taggttttgg ttatgttcac cactattttt aanaaaanan nttttaaaat 720
ttggttcaat tntctttttn aaacaatntg tttctacntt gnganctgat ttctaaaaaa 780
aataatnttt ggc 793
```

<210> 79

<211> 456

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 89, 195, 255, 263, 266, 286, 353, 384, 423, 425, 436, 441

<223> n = A,T,C or G

<400> 79

```

actagtatgg ggtgggaggc cccacccttc tcccctaggc gctgttcttg ctccaaaggg 60
ctccgtggag agggactggc agagctgang ccacctgggg ctggggatcc cactcttctt 120
gcagctgttg agcgcaccta accactggtc atgccccac ccctgctctc cgcacccgct 180
tcctcccgac cccangacca ggctacttct cccctcctct tgcctccctc ctgcccctgc 240
tgcctctgat cgtangaatt gangantgtc ccgccttgtg gctganaatg gacagtggca 300
ggggctggaa atgggtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gcnccccccc 360
tgcaagaccg agattgaggg aaancatgtc tgctgggtgt gacctgttt cctctccata 420
aantncccct gtgacnctca naaaaaaaaa aaaaaa 456

```

```

<210> 80
<211> 284
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 283
<223> n = A,T,C or G

```

```

<400> 80
ctttgtacct ctagaaaaga taggtattgt gtcacgaaac ttgagtttaa attttatata 60
taaaactaaa agtaatgctc acttttagcaa cacatactaa aattggaacc atactgagaa 120
gaatagcatg acctccgtgc aaacaggaca agcaaatttg tgatgtgttg attaaaaaga 180
aataaataaa tgtgtatatg tgtaacttgt atgtttatgt ggaatacaga ttgggaaata 240
aaatgtattt cttactgtga aaaaaaaaaa aaaaaaaaaa aana 284

```

```

<210> 81
<211> 671
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 388, 505, 600, 603, 615, 642, 644, 660
<223> n = A,T,C or G

```

```

<400> 81
gccaccaaca ttccaagcta ccctgggtac ctttgtgcag tagaagctag tgagcatgtg 60
agcaagcggg gtgcacacgg agactcatcg ttataattta ctatctgcca agagtagaaa 120
gaaaggctgg ggatatttgg gttggcttgg ttttgatttt ttgcttgttt gtttgttttg 180
tactaaaaca gtattatctt ttgaatatcg tagggacata agtatataca tgttatccaa 240
tcaagatggc tagaatgggt cctttctgag tgtctaaaac ttgacacccc tggtaaatct 300
ttcaacacac ttccactgcc tgcgtaatga agttttgatt catTTTTAAC cactggaatt 360
tttcaatgcc gtcattttca gttagatnat tttgcacttt gagattaaaa tgccatgtct 420
atttgattag tcttattttt ttatttttac aggcttatca gtctcactgt tggctgtcat 480
tgtgacaaag tcaaataaac ccccnaggac aacacacagt atgggatcac atattgtttg 540
acattaagct ttggccaaaa aatgttgcac gtgttttacc tcgacttgct aaatcaatan 600
canaaaggct ggctnataat gttggtgggt aaataattaa tnantaacca aaaaaaaaaa 660
aaaaaaaaaa a 671

```

```

<210> 82
<211> 217
<212> DNA
<213> Homo sapiens

```

<220>  
 <221> misc\_feature  
 <222> 35  
 <223> n = A,T,C or G

<400> 82  
 ctgcagatgt ttcttgaatg ctttgtcaaa ttaanaaagt taaagtgcaa taatgtttga 60  
 agacaataag tgggtggtgta tcttgtttct aataagataa acttttttgt ctttgcctta 120  
 tcttattagg gagttgtatg tcagtgtata aaacatactg tgtggtataa caggcttaat 180  
 aaattcttta aaaggaaaaa aaaaaaaaaa aaaaaaa 217

<210> 83  
 <211> 460  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 104, 118, 172, 401, 422, 423, 444, 449  
 <223> n = A,T,C or G

<400> 83  
 cgcgagtgagg agcaccagga tctcgggctc ggaacgagac tgcacggatt gttttaagaa 60  
 aatggcagac aaaccagaca tgggggaaat cgccagcttc gatnaggcca agctgaanaa 120  
 aacggagacg caggagaaga acaccctgcc gaccaaagag accattgagc angagaagcg 180  
 gagtgaaatt tcctaagatc ctggaggatt tcctaccccc gtcctcttcg agaccccgat 240  
 cgtgatgtgg aggaagagcc acctgcaaga tggacacgag ccacaagctg cactgtgaac 300  
 ctgggcactc cgcgccgatg ccaccggcct gtgggtctct gaagggaccc cccccaatcg 360  
 gactgcaaaa ttctccggtt tgccccggga tattatacaa nattatttgt atgaataatg 420  
 annataaaac acacctcgtg gcancaaana aaaaaaaaaa 460

<210> 84  
 <211> 323  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 70, 138, 178, 197, 228, 242, 244, 287, 311  
 <223> n = A,T,C or G

<400> 84  
 tgggtgatct tggctctgtg gagctgctgg gacgggatct aaaagactat tctggaagct 60  
 gtggtccaan gcattttgct ggcttaacgg gtcccggaac aaaggacacc agctctctaa 120  
 aattgaagtt taccganat aacaatcttt tgggcagaga tgcctatttt aacaaacncc 180  
 gtccttgccg aacaacnaac aatctctggg aaataccggc catgaacntg ctgtctcaat 240  
 cnancatctc tctagctgac cgatcatatc gtcccagatt actacanatc ataataattg 300  
 atttcctgta naaaaaaaaa aaa 323

<210> 85  
 <211> 771  
 <212> DNA  
 <213> Homo sapiens

<220>

<221> misc\_feature

<222> 63, 426, 471, 497, 521, 554, 583, 586, 606, 609, 615, 652, 686, 691, 694, 695, 706, 713, 730, 732, 743, 751

<223> n = A,T,C or G

<400> 85

```
aaactgggta ctcaacactg agcagatctg ttctttgagc taaaaacccat gtgctgtacc 60
aanagtttgc tcctggctgc tttgatgtca gtgctgctac tccacctctg cggcgaaatca 120
gaagcaagca actttgactg ctgtcttgga tacacagacc gtattcttca tcctaaattt 180
attgtgggct tcacacggca gctggccaat gaaggctgtg acatcaatgc tatcatcttt 240
cacacaaaga aaaagttgtc tgtgtgcgca aatccaaaac agacttgggt gaaatatatt 300
gtgcgctctcc tcagtaaaaa agtcaagaac atgtaaaaac tgtggctttt ctggaatgga 360
attggacata gcccaagaac agaaagaact tgctggggtt ggaggtttca cttgcacatc 420
atgganggtt tagtgcttat cttatttgtg cctcctggac ttgtccaatt natgaagtta 480
atcatattgc atcatanttt gctttgttta acatcacatt naaattaaac tgtattttat 540
gttattttata gctntaggtt ttctgtgttt aactttttat acnaantttc ctaaactatt 600
ttggtntant gcaanttaaa aattatattt ggggggggaa taaatattgg antttctgca 660
gccacaagct ttttttaaaa aaccantaca nccnngttaa atggtnngtc ccnaatgggt 720
tttgcttttn antagaaaat ttnttagaac natttgaaaa aaaaaaaaaa a 771
```

<210> 86

<211> 628

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 162, 249, 266, 348, 407, 427, 488, 518, 545, 566, 569, 597, 598, 611, 617, 621, 624

<223> n = A,T,C or G

<400> 86

```
actagtttgc tttacatttt tgaaaagtat tatttttgtc caagtgttta tcaactaaac 60
cttgtgttag gtaagaatgg aattttattaa gtgaatcagt gtgacccttc ttgtcataag 120
attatcttaa agctgaagcc aaaatatgct tcaaaagaaa angactttat tgttcattgt 180
agttcataca ttcaaagcat ctgaactgta gtttctatag caagccaatt acatccataa 240
gtggagaang aaatagatta atgtcnaagt atgattgggt gagggagcaa gggtgaagat 300
aatctggggt tgaaattttc tagttttcat tctgtacatt tttagttnga catcagattt 360
gaaatattaa tgtttacctt tcaatgtgtg gtatcagctg gactcantaa cacccttctc 420
ttccctnngg gatggggaat ggattattgg aaaatggaaa gaaaaaagta cttaaagcct 480
tcctttcnca gtttctggct cctaccctac tgatttancc agaataagaa aacattttat 540
catentctgc tttattccca ttaatnaant tttgatgaat aaatctgctt ttatgcnnac 600
ccaaggaatt nagtggnttc ntcnttgt 628
```

<210> 87

<211> 518

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 384, 421, 486

<223> n = A,T,C or G

<400> 87

```

ttttttatatt ttttttagaga gtagttcagc ttttatttat aaattttattg cctgtttttat 60
tataacaaca ttatactggt tatggtttaa tacatatggt tcaaaatgta taatacatca 120
agtagtacag tttttaaatt ttatgcttaa aacaagtttt gtgtaaaaaa tgcagatata 180
ttttacatgg caaatcaatt ttttaagtcac cctaaaaaatt gatttttttt tgaaatttaa 240
aaacacattt aattttcaatt tctctcttat ataaccttta ttactatagc atggttttcca 300
ctacagttta acaatgcagc aaaattccca tttcacggta aattggggtt taagcggcaa 360
gggttaaaatg ctttgaggat cctnaatacc ctttgaactt caaatgaagg ttatggttgt 420
naatttaacc ctcatgccat aagcagaagc acaagtttag ctgcattttg ctctaaactg 480
taaaancgag ccccccggtg aaaaagcaaa agggaccc 518

```

<210> 88

<211> 1844

<212> DNA

<213> Homo sapiens

<400> 88

```

gagacagtga atcctagtat caaaggattt ttggcctcag aaaaagttgt tgattatttt 60
tattttatatt tatttttcga gactccgtct caaaaaaaaa aaaaaaaaaa agaatcacia 120
ggattttgct aaagcatttt gagctgcttg gaaaaaggga agtagttgca gtagagtttc 180
ttccatcttc ttgggtgctgg gaagccatat atgtgtcttt tactcaagct aaggggtata 240
agcttatgtg ttgaatttgc tacatctata tttcacatat tctcacaata agagaatttt 300
gaaatagaaa tatcatagaa catttaagaa agtttagtat aaataatatt ttgtgtgttt 360
taatcccttt gaagggatct atccaaagaa aatattttac actgagctcc ttcctacacg 420
tctcagtaac agatcctgtg ttagtctttg aaaatagctc atttttttaa tgtcagtgag 480
tagatgtagc atacatatga tgtataatga cgtgtattat gttacaatg tctgcagatt 540
ttgtaggaat acaaaacatg gcctttttta taagcaaaac gggccaatga ctagaataac 600
acatagggca atctgtgaat atgtattata agcagcattc cagaaaagta gttggtgaaa 660
taattttcaa gtcaaaaagg gatattgaaa gggaattatg agtaacctct attttttaag 720
ccttgctttt aaattaaacg ctacagccat ttaagccttg aggataataa agcttgagag 780
taataatggt aggttagcaa aggtttagat gtatcacttc atgcatgcta ccatgatagt 840
aatgcagctc ttcgagtcac ttctggtcat tcaagatatt cacccttttg cccatagaaa 900
gcaccctacc tcacctgctt actgacattg tcttagctga tcacaagatc attatcagcc 960
tccattatcc cttactgtat ataaaatata gagttttata ttttcctttc ttcgtttttc 1020
accatattca aaacctaaat ttgtttttgc agatggaatg caaagtaatc aagtgttcgt 1080
gctttcacct agaagggtgt ggtcctgaag gaaagaggtc cctaaatatc cccaccctg 1140
gggtgctctc cttccctggt accctgacta ccagaagtca ggtgctagag cagctggaga 1200
agtgcagcag cctgtgcttc cacagatggg ggtgctgctg caacaaggct ttcaatgtgc 1260
ccatcttagg gggagaagct agatcctgtg cagcagcctg gtaagtcctg aggaggttcc 1320
attgctcttc ctgctgctgt cctttgcttc tcaacggggc tcgctctaca gtctagagca 1380
catgcagcta acttgtgcct ctgcttatgc atgagggtta aattaacaac cataaccttc 1440
atltgaagtt caaagggtga ttcaggatcc tcaaagcatt ttaaccttgc cgcttaaaac 1500
ccaatttacc gtgaaatggg aattttgtct cattgtttaa ctgtagtgga aaccatgcta 1560
tagtaataaaa ggttatataa gagagaaatt gaaattaaat gtgtttttta atttcaaaaa 1620
aaaatcaatc tttaggatga cttaaaaaatt gatttgccat gtaaaatgta tctgcatttt 1680
ttacacaaaa cttgttttta gcataaaatt ttaaaactgt actacttgat gtattataca 1740
ttttgaacca tatgtattaa accataaaca gtataatgtt gttataataa aacagggaat 1800
aaatttataa ataaaagctg aaaaaaaaaa aaaaaaaaaa aaaa 1844

```

<210> 89

<211> 523

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 288, 352, 369, 398, 475, 511, 513

<223> n = A,T,C or G

<400> 89

```

tttttttttt ttttttttagt caatccacat ttattgatca cttattatgt accaggcact 60
gggataaaga tgactgttag tcactcacag taaggaagaa aactagcaaa taagacgatt 120
acaatatgat gtagaaaatg ctaagccaga gatatagaaa ggtcctattg ggtccttctg 180
tcaccttgtc ttccacatc cctacccttc acaggccttc cctccagctt cctgcccccg 240
ctccccactg cagatcccct gggattttgc ctagagctaa acgagganat gggccccctg 300
gccctggcat gacttgaacc caaccacaga ctgggaaagg gagcctttcg anagtggatc 360
actttgatna gaaaacacat aggggaattga agagaaantc cccaaatggc caccctgtgct 420
ggtgctcaag aaaagtttgc agaatggata aatgaaggat caagggaatt aatanatgaa 480
taattgaatg gtggctcaat aagaatgact ncnttgaatg acc 523

```

<210> 90

<211> 604

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 563

<223> n = A,T,C or G

<400> 90

```

ccagtgtggt ggaatgcaaa gattaccccc gaagctttcg agaagctggg attccctgca 60
gcaaaggaat tagccaatat gtgtcgtttc tatgaaatga agccagaccg agatgtcaat 120
ctcaccacc aactaaatcc caaagtcaaa agcttcagcc agtttatctc agagaaccag 180
gggagccttc aagggcatgt agaaaatcag ctgttcagat aggcctctgc accacacagc 240
ctctttcctc tctgatcctt ttcctcttta cggcacaaca ttcattgttg acagaacatg 300
ctggaatgca attgtttgca acaccgaagg atttcctgcy gtcgcctctt cagtaggaag 360
cactgcattg gtgataggac acggtaattt gattcacatt taacttgcta gttagtgata 420
aggggtggta cacctgtttg gtaaaatgag aagcctcgga aacttgggag cttctctcct 480
accactaatg gggagggcag attattactg ggatttctcc tggggatgaat taatttcaag 540
ccctaattgc tgaaattccc ctnggcaggc tccagtttcc tcaactgcat tgcaaaattc 600
cccc 604

```

<210> 91

<211> 858

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 570, 591, 655, 664, 667, 683, 711, 759, 760, 765, 777, 787, 792, 794, 801, 804, 809, 817, 820

<223> n = A,T,C or G

<400> 91

```

tttttttttt ttttttttta tgattattat tttttttatt gatctttaca tctcagtgt 60

```

```

tggcagagtt tctgatgctt aataaacatt tgttctgac agataagtgg aaaaaattgt 120
catttcctta ttcaagccat gcttttctgt gatattctga tcctagtga acatacagaa 180
ataaatgtct aaaacagcac ctcgattctc gtctataaca ggactaagt cactgtgatc 240
ttaaataagc ttggctaaaa tgggacatga gtggaggtag tcacacttca gcgaagaaag 300
agaatctcct gtataatctc accaggagat tcaacgaatt ccaccacact ggactagtgg 360
atcccccggt ctgcaggaat tcgatatcaa gcttatcgat accgtcgacc tcgagggggg 420
gcccggtacc caattcgccc tatagtgagt cgtattacgc gcgctcactg gccgtcgttt 480
tacaacgtcg tgactgggaa aaccctggcg ttaccaact taatcgctt gcagcacatc 540
cccccttcgc cagctggcgt aatagcgaan agcccgacc gatcgccctt ncaacagttg 600
cgcagcctga atggcgaatg ggacgcgcc tgtagcggcg cattaaagcg cggcnggggtg 660
tgngngntcc cccacgtgac cgtacactt ggcagcgct tacgcccgtc ntctgctttc 720
ttcccttcc tctcgcacc gttcgccggg ttccccggn agctnttaat cgggggnctc 780
cctttanggg tncnaattaa nggnttacng gaccttngan cccaaaaact ttgattaggg 840
ggaaggtccc cgaagggg 858

```

```

<210> 92
<211> 585
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 317, 319, 320, 321, 325, 327, 328, 330, 331, 332, 460, 462,
483, 485, 487, 523, 538, 566, 584
<223> n = A,T,C or G

```

```

<400> 92
gttgaatctc ctggtgagat tatacaggag attctctttc ttcgctgaag tgtgactacc 60
tccactcatg tcccatttta gccaaagtta tttaagatca cagtgaactt agtcctgtta 120
tagacagaaa tcgaggtgct gttttagaca ttattttctg tatgttcaac taggatcaga 180
atatcacaga aaagcatggc ttgaataagg aaatgacaat tttttccact tatctgatca 240
gaacaaatgt ttattaagca tcagaaactc tgccaacact gaggatgtaa agatcaataa 300
aaaaaataat aatcatnann naaanannan nngaaggcg gccgccaccg cgggtggagct 360
ccagcttttg ttccctttag tgagggttaa ttgcgcgctt ggcgttaatc atggtcatag 420
ctgtttcctg tgtgaaattg ttatccggct cacaattccn cncaacatac gagccgggaa 480
gcntnangtg taaaagcctg ggggtgccta attgagttag ctnactcaca ttaattgngt 540
tgcgctccac ttgcccgctt ttccantccg ggaaacctgt tcgnc 585

```

```

<210> 93
<211> 567
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 82, 158, 230, 232, 253, 266, 267, 268, 269, 270, 271, 272,
273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284,
285, 286, 287, 295, 303, 307, 314, 349, 352, 354, 356, 366,
369, 379, 382, 386, 393, 404, 427, 428, 446, 450, 452
<223> n = A,T,C or G

```

```

<221> misc_feature
<222> 453, 454, 459, 462, 480, 481, 483, 488, 493, 501, 509, 511,
512, 518, 520, 525, 526, 532, 541, 557

```

<223> n = A,T,C or G

<400> 93

```

cggcagtgtt gctgtctgcg tgtccacctt ggaatctggc tgaactggct gggaggacca 60
agactgcggc tgggggtgggc anggaaggga accgggggct gctgtgaagg atcttggaac 120
ttccctgtac ccaccttccc cttgcttcat gtttgtanag gaaccttggt cgggccaagc 180
ccagtttcc tgtgtgatac actaatgtat ttgctttttt tgggaaatan anaaaaatca 240
attaaattgc tantgtttct ttgaannnnn nnnnnnnnnn nnnnnnnngg ggggncgccc 300
ccnccgngga aacnccccct tttgttccct ttaattgaaa ggttaattng cncncntggc 360
gttaancnt gggccaaanc tngttncceg tngtgaaatt gtnatcccc tcccaaattc 420
cccccnccc ttccaaaccc ggaaancctn annntgttna ancccggggg gttgcctaan 480
ngnaattnaa ccnaaccccc nttaaattng nntttgcncn ccacnngccc cncctttcca 540
nttcggggaa aaccctntcc gtgccca 567

```

<210> 94

<211> 620

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 169, 171, 222, 472, 528, 559, 599

<223> n = A,T,C or G

<400> 94

```

actagtcaaa aatgctaata taatttgga gaaaatattt ttaagtagt gttatagttt 60
catgtttatc ttttattatg ttttgtgaag ttgtgtcttt tctaataa cctatactat 120
gccaatattt ctttatactc atccataaca tttatactac atttgtaana naatatgcac 180
gtgaaactta acactttata aggtaaaaat gaggtttcca anatttaata atctgatcaa 240
gttcttggtt tttccaaata gaattggactt ggtctgttaa gggctaagga gaagaggaag 300
ataagggtta aagttgttaa tgaccaaaca ttctaaaaga aatgcaaaaa aaaagtttat 360
tttcaagcct tcgaactatt taaggaaagc aaaatcattt cctaaatgca tatcatttgt 420
gagaatttct cattaatatt ctgaatcatt catttcaacta aggtcatgt tnactccgat 480
atgtctctaa gaaagtacta tttcatggtc caaacctggt tgccatantt gggtaaaggc 540
tttcccttaa gtgtgaaant atttaaaatg aaattttcct ctttttaaaa attctttana 600
agggttaagg gtgttgaggga 620

```

<210> 95

<211> 470

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 61, 67, 79, 89, 106, 213, 271, 281, 330, 354, 387, 432, 448

<223> n = A,T,C or G

<400> 95

```

ctcgaccttc tctgcacagc ggatgaaccc tgagcagctg aagaccagaa aagccactat 60
nactttntgc ttaattcang agcttacang attcttcaaa gagtgngtcc agcatccttt 120
gaaacatgag ttcttaccag cagaagcaga cctttacccc accacctcag cttcaacagc 180
agcaggtgaa acaacccatc cagcctccac ctnaggaaat atttgttccc acaaccaagg 240
agccatgcca ctcaaagggt ccacaacctg naaacacaaa nattccagag ccaggctgta 300
ccaaggctcc tgagccaggg ctgtaccaan gtccctgagc caggttgtag caangtcctt 360

```

```
gagccaggat gtaccaaggt ccctgancca ggttgtccaa ggtccctgag ccaggctaca 420
ccaagggcct gngccaggca gcatcaangt ccctgaccaa ggcttatcaa 470
```

```
<210> 96
<211> 660
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 299, 311, 360, 426, 538, 540, 542, 553, 563, 565, 592, 603,
604, 618, 633, 647, 649, 651, 653
<223> n = A,T,C or G
```

```
<400> 96
tttttttttt tttttttttt ggaattaaaa gcaatttaaat gagggcagag caggaaacat 60
gcatttcttt tcatttgaat cttcagatga accctgagca gccgaagacc agaaaagcca 120
tgaagaacttt ctgcttaatt caggggctta caggattctt cagagtgtgt gtgaacaaaa 180
gctttatagt acgtattttt aggatacaaa taagagagag actatggctt ggggtgagaa 240
tgtactgatt acaaggtcta cagacaatta agacacagaa acagatggga agaggggtgnc 300
cagcatctgg nggttggctt ctcaagggtt tgtctgtgca ccaaattact tctgcttggn 360
cttctgctga gctgggcctg gagtgaccgt tgaaggacat ggctctggtta cctttgtgta 420
gcctgncaca ggaacttttg tgtatccttg ctccaggaact ttgatggcac ctggctcagg 480
aaacttgatg aagccttggt caaggacact tgatgcttgc tggctcaggg accttggn gn 540
ancctgggct canggacctt tgnncncaacc ttggcttcaa gggacccttg gnacatcctg 600
gennagggac ccttggnnc aaccctgggc ttnagggacc ctttggnntnc nanccttggc 660
```

```
<210> 97
<211> 441
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 12, 308
<223> n = A,T,C or G
```

```
<400> 97
gggaccatac anagtattcc tctcttcaca ccaggaccag ccactgttgc agcatgagtt 60
cccagcagca gaagcagccc tgcattccac cccctcagct tcagcagcag caggtgaaac 120
agccttgcca gcctccacct caggaaccat gcatcccaa aaccaaggag ccttgccacc 180
ccaaggtgcc tgagccctgc caccctaaag tgccctgagcc ctgccagccc aaggttccag 240
agccatgcca cccaaggtg cctgagccct gcccttcaat agtcactcca gcaccagccc 300
agcagaanac caagcagaag taatgtggtc cacagccatg cccttgagga gccggccacc 360
agatgctgaa tcccctatcc cattctgtgt atgagtccca tttgccttgc aattagcatt 420
ctgtctcccc caaaaaaaaaa a 441
```

```
<210> 98
<211> 600
<212> DNA
<213> Homo sapiens
```

```
<220>
```

<221> misc\_feature  
 <222> 295, 349, 489, 496, 583  
 <223> n = A,T,C or G

<400> 98  
 gtattcctct cttcacacca ggaccagcca ctgttgccagc atgagttccc agcagcagaa 60  
 gcagccctgc atcccccccc ctcagcttca gcagcagcag gtgaaacagc cttgccagcc 120  
 tccacctcag gaacctatgca tccccaaaac caaggagccc tgccacccca aggtgcctga 180  
 gccctgccac cccaaagtgc ctgagccctg ccagcccaag gttccagagc catgccaccc 240  
 caaggtgcct gagccctgcc cttcaatagt cactccagca ccagcccagc agaanaccaa 300  
 gcagaagtaa tgtggtccac agccatgccc ttgaggagcc ggccaccana tgctgaatcc 360  
 cctatcccat tctgtgtatg agtcccattt gccttgcaat tagcattctg tctcccccaa 420  
 aaaagaatgt gctatgaagc tttctttcct acacactctg agtctctgaa tgaagctgaa 480  
 ggtcttaant acagantag ttttcagctg ctcagaattc tctgaagaaa agattttaaga 540  
 tgaaaggcaa atgattcagc tccttattac cccattaaat tcnctttcaa ttccaaaaaa 600

<210> 99  
 <211> 667  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 345, 562, 635  
 <223> n = A,T,C or G

<400> 99  
 actagtgact gagttcctgg caaagaaatt tgacctggac cagttgataa ctcatgtttt 60  
 accattttaa aaaatcagtg aaggatttga gctgctcaat tcaggacaaa gcattcgaac 120  
 ggtcctgacg ttttgagatc caaagtggca ggaggtctgt gttgtcatgg tgaactggag 180  
 tttctcttgt gagagttccc tcatctgaaa tcatgtatct gtctcacaaa tacaagcata 240  
 agtagaagat ttgttgaaga catagaaccc ttataaagaa ttattaacct ttataaacat 300  
 ttaaagtctt gtgagcacct gggaattagt ataataacaa tgtnnatatt tttgatttac 360  
 attttgtaag gctataattg tatcttttaa gaaaacatac cttggatttc tatgttgaaa 420  
 tggagatttt taagagtttt aaccagctgc tgcagatata ttactcaaaa cagatatagc 480  
 gtataaagat atagtaaagc catctcctag agtaatatc acttaacaca ttggaaacta 540  
 ttatttttta gatttgaata tnaatgttat tttttaaaca cttgttatga gttacttggg 600  
 attacatttt gaaatcagtt cattccatga tgcanattac tgggattaga ttaagaaaga 660  
 cggaaaa 667

<210> 100  
 <211> 583  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 404, 506, 514, 527, 528, 538, 548, 556, 568, 569  
 <223> n = A,T,C or G

<400> 100  
 gttttgtttg taagatgatc acagtcattg tacactgatc taaaggacat atatataacc 60  
 ctttaaaaaa aaaatcactg cctcattctt atttcaagat gaatttctat acagactaga 120

```

tgtttttctg aagatcaatt agacattttg aaaatgattt aaagtgtttt ccttaatggt 180
ctctgaaaac aagttttctt ttagtattta accaaaaaag tgcccttttt gtcactggat 240
tctcctagca ttcattgattt ttttttcata caatgaaatt aaaattgcta aaatcatgga 300
ctggcctttct ggttggtattt caggtaagat gtgtttaagg ccagagcttt tctcagtatt 360
tgattttttt cccaatattt tgatttttta aaaatatata catnggtgct gcatttatat 420
ctgctgggtt aaaattctgt catatttcac ttctagcctt ttagttatgg caaatcatat 480
tttactttta cttaaagcat ttggttattt ggantatctg gttctannct aaaaaanta 540
attctatnaa ttgaantttt ggtactcnnc catatttga tcc 583

```

```

<210> 101
<211> 592
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 218, 497, 502, 533, 544, 546, 548, 550, 555
<223> n = A,T,C or G

```

```

<400> 101
gtggagacgt acaaagagca gccgctcaag acacctggga agaaaaagaa aggcaagccc 60
gggaaacgca aggagcagga aaagaaaaaa cggcgaactc gctctgcctg gttagactct 120
ggagtgactg ggagtgggct agaaggggac cacctgtctg acacctccac aacgtcgctg 180
gagctcgatt caggaggca ttgaaatttt cagcaganac cttccaagga catattgcag 240
gattctgtaa tagtgaacat atggaaagta ttagaaatat ttattgtctg taaatactgt 300
aatgcattg gaataaaaact gtctcccca ttgctctatg aaactgcaca ttggtcattg 360
tgaatatttt tttttttgcc aaggctaata caattattat tatcacattt accataattt 420
attttgtcca ttgatgtatt tttttttaa atgtatcttg gtgctgctga atttctatat 480
tttttgtaca taatgcnttt anatatacct atcaagtttg ttgataaatg acncaatgaa 540
gtgncncnan ttgngnggtg aatttaatat atgcctaatt ttattatccc aa 592

```

```

<210> 102
<211> 587
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 91, 131, 256, 263, 332, 392, 400, 403, 461, 496, 497, 499,
510, 511, 518, 519, 539, 554, 560, 576
<223> n = A,T,C or G

```

```

<400> 102
cgtcctaagc acttagacta catcagggaa gaacacagac cacatccctg tcctcatgcg 60
gcttatgttt tctggaagaa agtggagacc nagtccttgg ctttagggct ccccggtg 120
gggctgtgca ntccggtcag ggcgggaagg gaaatgcacc gctgcatgtg aacttacagc 180
ccaggcggat gccccttccc ttagcactac ctggcctcct gcatccctc gcctcatggt 240
cctcccactt tcaanaaatg aanaacccca ttggcccagc cccttgccct gggaaccaa 300
ggcagccttc caaaactcag gggctgaagc anactattag ggcaggggct gactttgggt 360
gacactgccc attccctctc agggcagctc angtcacccn ggntcttga acccagcctg 420
ttcctttgaa aaagggcaaa actgaaaagg gcttttctta naaaaagaaa aaccagggaa 480
ctttgccagg gcttcnntnt taccaaaacn ncttctcnng gatttttaat tccccattng 540
gcctccactt accnggggcn atgccccaaa attaanaatt tcccatc 587

```

<210> 103  
 <211> 496  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 2, 17, 66, 74, 82, 119, 164, 166, 172, 200, 203, 228, 232,  
 271, 273, 415, 423, 445, 446, 473  
 <223> n = A,T,C or G

<400> 103  
 anaggactgg ccctacntgc tctctctcgt cctacctatc aatgcccaac atggcagaac 60  
 ctgcancct tggncactgc anatggaaac ctctcagtg cttgacatca ccctaccnt 120  
 gcggtgggtc tccaccacaa ccactttgac tctgtggtcc ctgnanggtg gnttctcctg 180  
 actggcagga tggaccttan ccnecatata cctctgttcc ctctgctnag anaaagaatt 240  
 cccttaacat gatataatcc acccatgcaa ntngctactg gccagctac catttaccat 300  
 ttgcctacag aatttcattc agtctacact ttggcattct ctctggcgat agagtgtggc 360  
 tgggctgacc gcaaaagggtg ccttacacac tggccccac cctcaaccgt tgacncatca 420  
 gangcttgcc tctccttct gattnncccc catgttgat atcagggtgc tcnagggatt 480  
 ggaaaagaaa caaac 496

<210> 104  
 <211> 575  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 18, 19, 45, 68, 77, 132, 155, 174, 219, 226, 238, 259, 263,  
 271, 273, 306, 323, 339, 363, 368, 370, 378, 381, 382, 436,  
 440, 449, 450, 456, 481, 485, 496, 503, 510, 512, 515, 528,  
 542, 552  
 <223> n = A,T,C or G

<400> 104  
 gcacctgctc tcaatccnnc tctcaccatg atcctccgcc tgcanaaact cctctgcaa 60  
 ctatggangt ggtttcnggg gtggctcttg ccaactggga agaagccgtg gtgtctctac 120  
 ctgttcaact cngtttgtgt ctgggggatc aactnggggc tatggaagcg gctnaactgt 180  
 tgttttggtg gaagggtggt taattggctt tgggaagtng cttatngaag ttggcctnng 240  
 gaagttgcta ttgaaagtng ccntggaagt ngntttggtg gggggttttg ctggtggcct 300  
 ttgttnaatt tgggtgcttt gtnaatggcg gccccctenc ctgggcaatg aaaaaaatca 360  
 ccnatgcngn aaacctcnac nnaacagcct gggcttccct cacctcgaaa aaagtgtgctc 420  
 ccccccaaaa aaaggncaan cccctcaann tggaangttg aaaaaatcct cgaatgggga 480  
 ncccnaaaaa aaaaancccc ccntttcccn gnaanggggg aaataccncc cccccactta 540  
 cnaaaaccct tntaaaaaac cccccgggaa aaaaa 575

<210> 105  
 <211> 619  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature

<222> 260, 527, 560, 564, 566, 585, 599

<223> n = A,T,C or G

<400> 105

```
cactagtagg atagaaacac tgtgtcccga gagtaaggag agaagctact attgattaga 60
gcctaaccga ggttaactgc aagaagaggc gggatacttt cagctttcca tgtaactgta 120
tgcataaagc caatgtagtc cagtttctaa gatcatgttc caagctaact gaatcccact 180
tcaatacaca ctcatgaact cctgatggaa caataacagg cccaagcctg tggatatgatg 240
tgcacacttg ctagactcan aaaaaatact actctcataa atgggtggga gtattttggg 300
gacaacctac tttgcttggc tgagtgaagg aatgatattc atatattcat ttattccatg 360
gacatttagt tagtgctttt tatataccag gcatgatgct gagtgacact cttgtgtata 420
tttccaaatt tttgtacagt cgctgcacat atttgaaatc atatattaag acttccaaaa 480
aatgaagtcc ctggtttttc atggcaactt gatcagtaaa ggattcncct ctgtttggtg 540
ctttaaaccat ctactatatn gttnanatga aattcctttt cccncctcc cgaaaaaana 600
aagtgtgtgg gaaaaaaa 619
```

<210> 106

<211> 506

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 8, 21, 31, 32, 58, 75, 89, 96, 99, 103, 122, 126, 147, 150,  
158, 195, 210, 212, 219, 226, 246, 248, 249, 255, 258, 261,  
263, 265, 275, 304, 317, 321, 331, 337, 340, 358, 371, 377,  
380, 396, 450, 491

<223> n = A,T,C or G

<400> 106

```
cattgttctt ttcatttgcg ntggaagtgt nnatctctaa cagtggacaa agttcccngt 60
gccttaaaact ctgtnacact tttgggaant gaaaanttng tantatgata ggttattctg 120
angtanagat gttctggata ccattanatn tgccccngt gtcagaggct catattgtgt 180
tatgtaaatg gtatntcatt cgctactatn antcaattng aaatanggtc tttgggttat 240
gaatantnng cagcncanct nanangctgt ctgtngtatt catttgtgtc atagcacctc 300
acancattgt aacctcnatc nagtgagaca nactagnaana ttcctagtga tggctcanga 360
ttccaaatgg nctcatntcn aatgttttaa agttanttaa gtgtaagaaa tacagactgg 420
atgttccacc aactagtacc tgtaatgacn ggctgtgcc aacacatctc ctttttccat 480
gactgtgtga ncccgcacg gaaaaa 506
```

<210> 107

<211> 452

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 289, 317, 378

<223> n = A,T,C or G

<400> 107

```
gttgagtctg tactaaacag taagatatct caatgaacca taaattcaac tttgtaaaaa 60
tcttttgaag catagataat attgtttggg aaatgtttct tttgtttggg aaatgtttct 120
tttaaagacc ctctattct ataaaactct gcatgtagag gcttgtttac ctttctctct 180
```

```

ctaagggttta caataggagt ggtgatttga aaaatataaa attatgagat tggttttcct 240
gtggcataaaa ttgcatcact gtatcatttt cttttttaac cggttaagant ttcagtttgt 300
tggaagtaaa ctgtganaac ccagtttccc gtccatctcc cttagggact acccatagaa 360
catgaaaagg tccccacnga agcaagaaga taagtctttc atggctgctg gttgcttaaa 420
ccactttaaa accaaaaaat tccccttga aa 452

```

```

<210> 108
<211> 502
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 22, 31, 126, 168, 183, 205, 219, 231, 236, 259, 283, 295,
296, 298, 301, 340, 354, 378, 383, 409, 433, 446, 455, 466,
488
<223> n = A,T,C or G

```

```

<400> 108
atcttcttcc cttaattagt tnttatttat ntattaaatt ttattgcatg tcctggcaaa 60
caaaaagaga ttgtagattg gcttctggct ccccaaaagc ccataacaga aagtaccaca 120
agaccncaac tgaagcttaa aaaatctatc acatgtataa tacctttnga agaacattaa 180
tanagcatat aaaactttta acatntgctt aatgttgtnc aattataaaa ntaatngaaa 240
aaaatgtccc tttaacatnc aatatcccac atagtgttat ttnaggggat taccnngnaa 300
naaaaaaagg gtagaaggga tttaatgaaa actctgcttn ccatttctgt ttanaaacgt 360
ctccagaaca aaaacttntc aantctttca gctaaccgca tttgagctna ggccactcaa 420
aaactccatt agnccactt tctaanggtc tctanagctt actaancctt ttgacccctt 480
accctggnta ctctgcct ca 502

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<210> 109
<211> 1308
<212> DNA
<213> Homo sapiens

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<400> 109
acccgaggtc tcgctaaaat catcatggat tcacttggcg ccgtcagcac tcgacttggg 60
tttgatcttt tcaaagagct gaagaaaaca aatgatggca acatcttctt tttccctgtg 120
ggcatcttga ctgcaattgg catggtcctc ctggggaccc gaggagccac cgcttcccag 180
ttggaggagg tgtttcactc tgaaaaagag acgaagagct caagaataaa ggctgaagaa 240
aaagagggtga ttgagaacac agaagcagta catcaacaat tccaaaagtt tttgactgaa 300
ataagcaaac tactaatga ttatgaactg aacataacca acaggctgtt tggagaaaaa 360
acatacctct tccttcaaaa atacttagat tatgttgaaa aatattatca tgcattctctg 420
gaacctgttg attttgtaaa tgcagccgat gaaagtcgaa agaagattaa ttcctgggtt 480
gaaagcaaaa caaatgaaaa aatcaaggac ttgttcccag atggctctat tagtagctct 540
accaagctgg tgctggtgaa catggtttat tttaaagggc aatgggacag ggagttaaag 600
aaagaaaata ctaaggaaga gaaatttttg atgaataaga gcacaagtaa atctgtacag 660
atgatgacac agagccattc ctttagcttc actttcctgg aggacttgca ggccaaaatt 720
ctagggattc catataaaaa caacgacctt agcatgtttg tgcttctgcc caacgacatc 780
gatggcctgg agaagataat agataaaata agtcctgaga aattggtaga gtggactagt 840
ccagggcata tggaagaaag aaaggtgaat ctgcacttgc cccggtttga ggtggaggac 900
agttacgatc tagaggcgtt cctggctgcc atggggatgg gcgatgcctt cagtgaacac 960
aaagccgact actcggaat gtcgtcaggc tccgggttgt acgcccagaa gttcctgcac 1020
agttcctttg tggcagtaac tgaggaaggc accgaggctg cagctgccac tggcataggc 1080
tttactgtca catccgcccc aggtcatgaa aatgttcact gcaatcatcc cttcctgttc 1140

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ttcatcaggc acaatgaatc caacagcatc ctcttcttcg gcagattttc ttctccttaa 1200
gatgatcggt gccatggcat tgctgctttt agcaaaaaac aactaccagt gttactcata 1260
tgattatgaa aatcgccat tcttttaaat ggtggctcac ttgcattt 1308

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<210> 110
<211> 391
<212> PRT
<213> Homo sapiens

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<400> 110
Met Asp Ser Leu Gly Ala Val Ser Thr Arg Leu Gly Phe Asp Leu Phe
 1          5          10          15
Lys Glu Leu Lys Lys Thr Asn Asp Gly Asn Ile Phe Phe Ser Pro Val
 20          25          30
Gly Ile Leu Thr Ala Ile Gly Met Val Leu Leu Gly Thr Arg Gly Ala
 35          40          45
Thr Ala Ser Gln Leu Glu Glu Val Phe His Ser Glu Lys Glu Thr Lys
 50          55          60
Ser Ser Arg Ile Lys Ala Glu Glu Lys Glu Val Ile Glu Asn Thr Glu
 65          70          75          80
Ala Val His Gln Gln Phe Gln Lys Phe Leu Thr Glu Ile Ser Lys Leu
 85          90          95
Thr Asn Asp Tyr Glu Leu Asn Ile Thr Asn Arg Leu Phe Gly Glu Lys
100          105          110
Thr Tyr Leu Phe Leu Gln Lys Tyr Leu Asp Tyr Val Glu Lys Tyr Tyr
115          120          125
His Ala Ser Leu Glu Pro Val Asp Phe Val Asn Ala Ala Asp Glu Ser
130          135          140
Arg Lys Lys Ile Asn Ser Trp Val Glu Ser Lys Thr Asn Glu Lys Ile
145          150          155          160
Lys Asp Leu Phe Pro Asp Gly Ser Ile Ser Ser Ser Thr Lys Leu Val
165          170          175
Leu Val Asn Met Val Tyr Phe Lys Gly Gln Trp Asp Arg Glu Phe Lys
180          185          190
Lys Glu Asn Thr Lys Glu Glu Lys Phe Trp Met Asn Lys Ser Thr Ser
195          200          205
Lys Ser Val Gln Met Met Thr Gln Ser His Ser Phe Ser Phe Thr Phe
210          215          220
Leu Glu Asp Leu Gln Ala Lys Ile Leu Gly Ile Pro Tyr Lys Asn Asn
225          230          235          240
Asp Leu Ser Met Phe Val Leu Leu Pro Asn Asp Ile Asp Gly Leu Glu
245          250          255
Lys Ile Ile Asp Lys Ile Ser Pro Glu Lys Leu Val Glu Trp Thr Ser
260          265          270
Pro Gly His Met Glu Glu Arg Lys Val Asn Leu His Leu Pro Arg Phe
275          280          285
Glu Val Glu Asp Ser Tyr Asp Leu Glu Ala Val Leu Ala Ala Met Gly
290          295          300
Met Gly Asp Ala Phe Ser Glu His Lys Ala Asp Tyr Ser Gly Met Ser
305          310          315          320
Ser Gly Ser Gly Leu Tyr Ala Gln Lys Phe Leu His Ser Ser Phe Val
325          330          335
Ala Val Thr Glu Glu Gly Thr Glu Ala Ala Ala Ala Thr Gly Ile Gly
340          345          350

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Phe Thr Val Thr Ser Ala Pro Gly His Glu Asn Val His Cys Asn His  
           355                                  360                                  365  
 Pro Phe Leu Phe Phe Ile Arg His Asn Glu Ser Asn Ser Ile Leu Phe  
           370                                  375                                  380  
 Phe Gly Arg Phe Ser Ser Pro  
 385                                  395

<210> 111  
 <211> 1419  
 <212> DNA  
 <213> Homo sapiens

<400> 111  
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 ccagccacca ccgtctctcc aaaaacccga ggtctcgcta aaatcatcat ggattcactt 120  
 ggcgcgctca gcactcgact tgggtttgat cttttcaaag agctgaagaa aacaaatgat 180  
 ggcaacatct ttttttcccc tgtgggcac ttgactgcaa ttggcatggt cctcctgggg 240  
 acccgaggag ccaccgcttc ccagttggag gaggtgtttc actctgaaaa agagacgaag 300  
 agctcaagaa taaaggctga agaaaaagag gtggttaagaa taaaggctga aggaaaagag 360  
 attgagaaca cagaagcagt acatcaacaa ttccaaaagt ttttgactga aataagcaaa 420  
 ctactaatg attatgaact gaacataacc aacaggctgt ttggagaaaa aacatacctc 480  
 ttccttcaaa aatacttaga ttatgttgaa aaatattatc atgcatctct ggaacctgtt 540  
 gattttgtaa atgcagccga tgaaagtcga aagaagatta attcctgggt tgaaagcaaa 600  
 acaaatgaaa aaatcaagga cttgttccca gatggctcta ttagtagctc taccaagctg 660  
 gtgctgggtga acatggttta ttttaaaggg caatgggaca gggagttaa gaaagaaaat 720  
 actaaggaag agaaattttg gatgaataag agcacaagta aatctgtaca gatgatgaca 780  
 cagagccatt ctttagctt cactttcctg gaggacttgc aggccaaaat tctagggatt 840  
 ccatataaaa acaacgacct aagcatgttt gtgcttctgc ccaacgacat cgatggcctg 900  
 gagaagataa tagataaaat aagtcctgag aaattggtag agtggactag tccagggcat 960  
 atggaagaaa gaaagggtgaa tctgcacttg ccccggtttg aggtggagga cagttacgat 1020  
 cttagggcgg tcctggctgc catggggatg ggcgatgcct tcagttagca caaagccgac 1080  
 tactcgggaa tgtcgtcagg ctccgggttg tacgccaga agttcctgca cagttccttt 1140  
 gtggcagtaa ctgaggaagg caccgaggct gcagctgcc a ctggcatagg ctttactgtc 1200  
 acatccgcc caggtcatga aaatgttcac tgcaatcac ccttctgtt cttcatcagg 1260  
 cacaatgaat ccaacagcat cctcttcttc ggcagatttt cttctcctta agatgatcgt 1320  
 tgccatggca ttgctgcttt tagcaaaaaa caactaccag tggttactcat atgattatga 1380  
 aaatcgcca ttcttttaaa tgggtggtca cttgcattt 1419

<210> 112  
 <211> 400  
 <212> PRT  
 <213> Homo sapiens

<400> 112  
 Met Asp Ser Leu Gly Ala Val Ser Thr Arg Leu Gly Phe Asp Leu Phe  
   1                  5                  10                  15  
 Lys Glu Leu Lys Lys Thr Asn Asp Gly Asn Ile Phe Phe Ser Pro Val  
           20                  25                  30  
 Gly Ile Leu Thr Ala Ile Gly Met Val Leu Leu Gly Thr Arg Gly Ala  
           35                  40                  45  
 Thr Ala Ser Gln Leu Glu Glu Val Phe His Ser Glu Lys Glu Thr Lys  
           50                  55                  60  
 Ser Ser Arg Ile Lys Ala Glu Glu Lys Glu Val Val Arg Ile Lys Ala

65					70					75					80
Glu	Gly	Lys	Glu	Ile	Glu	Asn	Thr	Glu	Ala	Val	His	Gln	Gln	Phe	Gln
				85					90					95	
Lys	Phe	Leu	Thr	Glu	Ile	Ser	Lys	Leu	Thr	Asn	Asp	Tyr	Glu	Leu	Asn
			100					105					110		
Ile	Thr	Asn	Arg	Leu	Phe	Gly	Glu	Lys	Thr	Tyr	Leu	Phe	Leu	Gln	Lys
		115					120					125			
Tyr	Leu	Asp	Tyr	Val	Glu	Lys	Tyr	Tyr	His	Ala	Ser	Leu	Glu	Pro	Val
	130					135					140				
Asp	Phe	Val	Asn	Ala	Ala	Asp	Glu	Ser	Arg	Lys	Lys	Ile	Asn	Ser	Trp
145				150						155					160
Val	Glu	Ser	Lys	Thr	Asn	Glu	Lys	Ile	Lys	Asp	Leu	Phe	Pro	Asp	Gly
			165					170					175		
Ser	Ile	Ser	Ser	Ser	Thr	Lys	Leu	Val	Leu	Val	Asn	Met	Val	Tyr	Phe
			180				185						190		
Lys	Gly	Gln	Trp	Asp	Arg	Glu	Phe	Lys	Lys	Glu	Asn	Thr	Lys	Glu	Glu
		195				200					205				
Lys	Phe	Trp	Met	Asn	Lys	Ser	Thr	Ser	Lys	Ser	Val	Gln	Met	Met	Thr
	210				215						220				
Gln	Ser	His	Ser	Phe	Ser	Phe	Thr	Phe	Leu	Glu	Asp	Leu	Gln	Ala	Lys
225				230						235					240
Ile	Leu	Gly	Ile	Pro	Tyr	Lys	Asn	Asn	Asp	Leu	Ser	Met	Phe	Val	Leu
			245					250					255		
Leu	Pro	Asn	Asp	Ile	Asp	Gly	Leu	Glu	Lys	Ile	Ile	Asp	Lys	Ile	Ser
		260					265					270			
Pro	Glu	Lys	Leu	Val	Glu	Trp	Thr	Ser	Pro	Gly	His	Met	Glu	Glu	Arg
	275					280					285				
Lys	Val	Asn	Leu	His	Leu	Pro	Arg	Phe	Glu	Val	Glu	Asp	Ser	Tyr	Asp
	290				295						300				
Leu	Glu	Ala	Val	Leu	Ala	Ala	Met	Gly	Met	Gly	Asp	Ala	Phe	Ser	Glu
305				310					315						320
His	Lys	Ala	Asp	Tyr	Ser	Gly	Met	Ser	Ser	Gly	Ser	Gly	Leu	Tyr	Ala
			325					330					335		
Gln	Lys	Phe	Leu	His	Ser	Ser	Phe	Val	Ala	Val	Thr	Glu	Glu	Gly	Thr
		340					345					350			
Glu	Ala	Ala	Ala	Ala	Thr	Gly	Ile	Gly	Phe	Thr	Val	Thr	Ser	Ala	Pro
	355					360					365				
Gly	His	Glu	Asn	Val	His	Cys	Asn	His	Pro	Phe	Leu	Phe	Phe	Ile	Arg
	370				375					380					
His	Asn	Glu	Ser	Asn	Ser	Ile	Leu	Phe	Phe	Gly	Arg	Phe	Ser	Ser	Pro
385				390					395						400

<210> 113  
 <211> 957  
 <212> DNA  
 <213> Homo sapiens

<400> 113  
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 gactttctgc ttaattcagg agcttacagg attcttcaaa gagtgtgtcc agcatccttt 120  
 gaaacatgag ttcttaccag cagaagcaga cctttacccc accacctcag cttcaacagc 180  
 agcaggtgaa acaaccacgc cagcctccac ctccaggaaat atttggtccc acaaccaagg 240  
 agccatgccca ctcaaagggtt ccacaacctg gaaacacaaa gattccagag ccaggctgta 300

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ccaaggtccc tgagccaggc tgtaccaagg tccctgagcc aggttggtacc aaggtccctg 360
agccaggatg taccaaggtc cctgagccag gttgtaccaa ggtccctgag ccaggctaca 420
ccaaggtccc tgagccaggc agcatcaagg tccctgacca aggcttcac aagtttcctg 480
agccagggtgc catcaaagtt cctgagcaag gatacaccaa agttcctgtg ccaggctaca 540
caaaggtacc agagccatgt ccttcaacgg tcaactccagg cccagctcag cagaagacca 600
agcagaagta atttggtgca cagacaagcc cttgagaagc caaccaccag atgctggaca 660
ccctcttccc atctgtttct gtgtcttaat tgtctgtaga ccttgtaatc agtacattct 720
caccccaagc catagtctct ctcttatttg tatcctaaaa atacggtact ataaaagcttt 780
tgttcacaca cactctgaag aatcctgtaa gccctgaat taagcagaaa gtcttcatgg 840
cttttctggg cttcggtgc tcagggttca tctgaagatt cgaatgaaaa gaaatgcatg 900
tttctgctc tgccctcatt aaattgcttt taattccaaa aaaaaaaaaa aaaaaaa 957

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<210> 114
<211> 161
<212> PRT
<213> Homo sapiens

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<400> 114
Met Ser Ser Tyr Gln Gln Lys Gln Thr Phe Thr Pro Pro Pro Gln Leu
  1           5           10           15
Gln Gln Gln Gln Val Lys Gln Pro Ser Gln Pro Pro Pro Gln Glu Ile
          20           25           30
Phe Val Pro Thr Thr Lys Glu Pro Cys His Ser Lys Val Pro Gln Pro
          35           40           45
Gly Asn Thr Lys Ile Pro Glu Pro Gly Cys Thr Lys Val Pro Glu Pro
          50           55           60
Gly Cys Thr Lys Val Pro Glu Pro Gly Cys Thr Lys Val Pro Glu Pro
          65           70           75           80
Gly Cys Thr Lys Val Pro Glu Pro Gly Cys Thr Lys Val Pro Glu Pro
          85           90           95
Gly Tyr Thr Lys Val Pro Glu Pro Gly Ser Ile Lys Val Pro Asp Gln
          100          105          110
Gly Phe Ile Lys Phe Pro Glu Pro Gly Ala Ile Lys Val Pro Glu Gln
          115          120          125
Gly Tyr Thr Lys Val Pro Val Pro Gly Tyr Thr Lys Val Pro Glu Pro
          130          135          140
Cys Pro Ser Thr Val Thr Pro Gly Pro Ala Gln Gln Lys Thr Lys Gln
          145          150          155          160
Lys

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```

<210> 115
<211> 506
<212> DNA
<213> Homo sapiens

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<220>
<221> misc_feature
<222> 8, 21, 31, 32, 58, 75, 89, 96, 99, 103, 122, 126, 147, 150,
158, 195, 210, 212, 219, 226, 246, 248, 249, 255, 258, 261,
263, 265, 275, 304, 317, 321, 331, 337, 340, 358, 371, 377,
380, 396, 450, 491
<223> n = A,T,C or G

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&lt;400&gt; 115

cattggtnct	ttcatttgct	ntggaagtgt	nmatctctaa	cagtggacaa	agttcccngt	60
gccttaaact	ctgtnacact	tttggaant	gaaaanttn	tantatgata	ggttattctg	120
angtanagat	gttctggata	ccattanatn	tgccccngt	gtcagaggct	catattgtgt	180
tatgtaaag	gtatntcatt	cgctactatn	antcaattn	aaatanggtc	tttgggttat	240
gaatantnng	cagcncanct	nanangctgt	ctgtngtatt	cattgtggtc	atagcacctc	300
acancattgt	aacctcnatc	nagtggagaca	nactagnaan	ttcctagtga	tggctcanga	360
ttccaaatgg	ntcatntcn	aatgtttaaa	agttanttaa	gtgtaagaaa	tacagactgg	420
atgttccacc	aactagtacc	tgtaatgacn	ggcctgtccc	aacacatctc	ccttttccat	480
gactgtggta	nccgcgcatc	gaaaaa				506

&lt;210&gt; 116

&lt;211&gt; 3079

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 116

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ggtcaaaggg	cagaaaaaat	gctgagttag	gaggagctat	ggaaggataa	acctggcctt	120
aaagaggtca	aagtggttta	tagggggcgc	tgagggttc	ccacattctc	tggcctaaac	180
cttgaggca	gatctgccca	gtgggctctg	ggatagctgt	gccttcccta	acaaaaaat	240
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taaaaagggg	catcaccggt	cctgggtaac	agagccacct	tctgcgtcct	gctgagctct	840
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ccaccatgtc	tcgccagtca	agtgtgtctt	ccggagcggg	gggcagtcgt	agcttcagca	960
ccgcctctgc	catcaccccc	tctgtctccc	gcaccagctt	cacctccgtg	tcccgggtccg	1020
ggggtggcgg	tggtggtggc	ttcggcaggg	tcagccttgc	gggtgcttgt	ggagtgggtg	1080
gctatggcag	ccggagcctc	tacaacctgg	ggggctccaa	gaggatatcc	atcagcacta	1140
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tccgcaacac	caagcatgag	atctctgaga	tgaaccggat	gatccagagg	ctgagagccg	2100
agattgacaa	tgtcaagaaa	cagtgcgcca	atctgcagaa	cgccattgcg	gatgccgagc	2160

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agcgtgggga gctggccctc aaggatgcc a ggaacaagct ggccgagctg gaggaggccc 2220
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gcagactcag tggagaagga gttggaccag tcaacatctc tgttgtcaca agcagtgttt 2400
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tcccaaatct aaatcatcaa aacagaatcc ccacccaat cccaaatttt gttttggttc 3000
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gttttttttt tctacccaa 3079

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<210> 117
<211> 6921
<212> DNA
<213> Homo sapiens

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<400> 117
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taaattggaag gtcattagtc ctactgggaa tgaggctatg gtcccatctg tgtgcttcac 180
cgttcctcca ccaaacaag aagcgggtga ccttgccaac agaattgagc aacagtatca 240
gaatgtcctg actctttggc atgagtctca cataaacatg aagagtgtag tatcctggca 300
ttatctcatc aatgaaattg atagaattcg agctagcaat gtggcttcaa taaagacaat 360
gtaacctggg gaacatcagc aagttctaag taatctacaa tctcgttttg aagattttct 420
ggaaagatag caggaatccc aagtcttttc aggtcagat ataacacaac tggaaaagga 480
ggttaatgta tgtaagcagt attatcaaga acttcttaaa tctgcagaaa gagaggagca 540
agaggaatca gtttataatc tctacatctc tgaagttcga aacattagac ttcggttaga 600
gaactgtgaa gatcgggtga ttagacagat tcgaactccc ctggaagag atgatttgca 660
tgaaagtgtg ttcagaatca cagaacagga gaaactaaag aaagagctgg aacgacttaa 720
agatgatttg ggaacaatca caaataagtg tgaggagttt ttcagtcaag cagcagcctc 780
ttcatcagtc cctaccctac gatcagagct taatgtggtc cttcagaaca tgaaccaagt 840
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 <211> 587  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
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 510, 511, 518, 519, 539, 554, 560, 576  
 <223> n = A,T,C or G

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<210> 121  
 <211> 619  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 260, 527, 560, 564, 566, 585, 599  
 <223> n = A,T,C or G

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 gacaacctac tttgcttggc tgagtgaagg aatgatattc atatattcat ttattccatg 360  
 gacatttagt tagtgctttt tatataccag gcctgatgct gagtgacact cttgtgtata 420  
 tttccaaatt tttgtacagt cgctgcacat atttgaaatc atatattaag acttccaaaa 480  
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<210> 122  
 <211> 1475  
 <212> DNA  
 <213> Homo sapiens

<400> 122  
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<210> 123

<211> 2294

<212> DNA

<213> Homo sapiens

<400> 123

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<210> 124
<211> 956
<212> DNA
<213> Homo sapiens

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<400> 124
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<210> 125
<211> 486
<212> DNA
<213> Homo sapiens

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<220>
<221> misc_feature
<222> 16
<223> n = A,T,C or G

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tttact						486

&lt;210&gt; 126

&lt;211&gt; 3552

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 126

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<212> DNA
<213> Homo sapiens

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<210> 128
<211> 374
<212> DNA
<213> Homo sapiens

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aaaaaacaga  gccagcta  catttccaaa  ggttagtata  tccctgctga  cctcttcttt  240
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aacttaaaaa  gctg  374

```

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<210> 129

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<211> 546  
 <212> DNA  
 <213> Homo sapiens

<400> 129

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<210> 130  
 <211> 5156  
 <212> DNA  
 <213> Homo sapiens

<400> 130

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 <212> DNA  
 <213> Homo sapiens

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<210> 132  
 <211> 590  
 <212> DNA  
 <213> Homo sapiens

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 <211> 581  
 <212> DNA  
 <213> Homo sapiens

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<210> 134
<211> 4797
<212> DNA
<213> Homo sapiens
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<221> misc_feature
<222> 135, 501, 4421, 4467, 4468, 4698
<223> n = A,T,C or G
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&lt;210&gt; 135

&lt;211&gt; 2856

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 135

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&lt;210&gt; 136

&lt;211&gt; 356

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 136

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aggcattgat	gatgatgaag	attttatctc	cagcaccatt	tcaaccacac	cacgggcttt	120
tgaccacaca	aaacagaacc	aggactggac	tcagtggaa	ccaagccatt	caaataccga	180
agtgtacttt	cagacaacca	caaggatgac	tgatgtagac	agaaatggca	ccactgctta	240
tgaaggaaac	tggaaaccag	aagcacaccc	tcccctcatt	caccatgagc	atcatgagga	300
agaagagacc	ccacattcta	caagcacaat	ccaggcaact	cctagtagta	caacgg	356

<210> 137  
 <211> 356  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 254, 264, 279, 281, 290, 328, 342  
 <223> n = A,T,C or G

<400> 137  
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 gtcactggct gcccccgaa cagggcgctg ctccatggct ctgcttggtg tagtctgtgg 120  
 ctatgtctcc cagcaaggac agaaactcag aaaaatcaat cttcttatcc tcattcttgt 180  
 cctttttctc aaagacatcg gcgaggtaat ttgtgccctt tttacctcgg ccgcgcacca 240  
 cgctaaggcc aaanttcag acanayggcc gggccggtnc nataggggan cccaacttgg 300  
 ggacccaaac tctggcgcg aaacacangg gcataagctt gnttcctgtg gggaaa 356

<210> 138  
 <211> 353  
 <212> DNA  
 <213> Homo sapiens

<400> 138  
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 aatagacact tagattttctc tottgtggga agaaaccacc tgtccatcca ctgactcttc 120  
 tacattgatg tggaaattgc tgctgctacc accacctcct gaagaggctt ccctgatgcc 180  
 aatgccagcc atcttggcat cctggccctc gaggcaggct cggttaagtag cgatctcctg 240  
 ctccagccgt gtctttatgt caagcagcat cttgtactcc tggttctgag cctccatctc 300  
 gcacgcggagc tcaactcagac ctgcscgsg mssmcgctam gccgaattcc agc 353

<210> 139  
 <211> 371  
 <212> DNA  
 <213> Homo sapiens

<400> 139  
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 agacatattc tacacttcaa agctttgggtg caattcccat cgaccagagt tgggccgacc 120  
 agccttggaag aggtcactga aaaatcttca attggattat gttgacctct accttattca 180  
 ttttccagtg tctgtaaagc caggtgagga agtgatccca aaagatgaaa atggaaaaat 240  
 actatttgac acagtggatc tctgtgccac gtgggaggcc gtggagaagt gtaaagatgc 300  
 aggattggac ctgcccgggc ggccgctcga aagccgaatt ccagcacact ggccggccgtt 360  
 actagtggtat c 371

<210> 140  
 <211> 370  
 <212> DNA  
 <213> Homo sapiens

<400> 140  
 tagcgtggtc gcggccgagg tccatctccc tttgggaact agggggctgc tgggtgggaaa 60  
 tgggagccag ggcagatggt gcattccttt gtgtccctgt aaatgtggga ctacaagaag 120

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aggagctgcc tgagtggtag tttctcttcc tggtaatcct ctggcccagc ctcatggcag 180
aatagaggta ttttttaggt atttttgtaa tatggcttct ggtcaaaatc cctgtgtagc 240
tgaattccca agccctgcat tgtacagccc cccactcccc tcaccaccta ataaaggaaat 300
agttaacact caaaaaaaaa aaaaaaacctg cccggggcggc cgctcgaaag ccgaattcca 360
gcacactggc                                     370

```

```

<210> 141
<211> 371
<212> DNA
<213> Homo sapiens

```

```

<400> 141
tagcgtgggc gcggccgagg tcctctgtgc tgctgtcac agcccgatgg taccagcgca 60
gggtgtaggc agtgcaggag cctcatcca gtggcaggga acaggggtca tcactatccc 120
aaggagcttc agggctcctg tactcctcca cagaatactc ggagtattca gactactcat 180
catcctcagg gggtagccgc tcttcctcct ctgcatgaga gacgcggagc acaggcacag 240
catggagctg ggagccggca gtgtctgcag cataactagg gaggggtcgt gatccagatg 300
cgatgaactg gccctggcag gcacagtgtc gactcatctc ttggcgacct gcccgggcgg 360
ccgctcgaaag c                                     371

```

```

<210> 142
<211> 343
<212> DNA
<213> Homo sapiens

```

```

<400> 142
gcgtttttgag gccaatggtg taaaaggaaa tatcttcaca taaaaactag atggaagcat 60
tgtcagaaac ctctttgtga tgtttgcttt caactcacag agttgaacat tccttttcat 120
agagcagttt tgaaacactc tttttagtaa tttgcaagcg gatgattgga tcgctatgag 180
gtcttcattg gaaacgggat acctttacat aaaaactaga cagtagcatt ctcagaaatt 240
tctttgggat gtgggcattc aaccacaga ggagaacttc atttgataga gcagttttga 300
aacacccttt ttgtagaatc tacaggtgga catttagagt gct                                     343

```

```

<210> 143
<211> 354
<212> DNA
<213> Homo sapiens

```

```

<400> 143
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catcaggagt gggatgggaa ggaaagcaca ataacaagaa aattgaaaga tgggaaatta 120
gtggtggagt gtgtcatgaa caatgtcacc tgtactcgga tctatgaaaa agtagaataa 180
aaattccatc atcacttttg acaggagtta attaagagaa tgaccaagct cagttcaatg 240
agcaaatact catactgttt ctttcttttt tttttcatta ctgtgttcaa ttatctttat 300
cataaacatt ttacatgcag ctatttcaaa gtgtgttgga ttaattagga tcat                                     354

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```

<210> 144
<211> 353
<212> DNA
<213> Homo sapiens

```

```

<400> 144
ggtcaaggac ctgggggacc cccagggtcca gcagccacat gattctgcag cagacagggg 60
cctagagcac atctggatct cagccccacc cctggcaacc tgctgccta gagaactccc 120

```

```

aagatgacag actaagtagg attctgccat ttagaataat tctggtatcc tgggcgttgc 180
gttaagttgc ttaactttca ttctgtctta cgatagtctt cagaggtggg aacagatgaa 240
gaaaccatgc cccagagaag gttaagtgc ttctcttcta tggagccagt gttccaacct 300
aggtttgcct gataccagac ctgtggcccc acctcccatg caggtctctg tgg          353

```

```

<210> 145
<211> 371
<212> DNA
<213> Homo sapiens

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```

<400> 145
caggtctgtc ataaactggg ctggagtttc tgacgactcc ttgttcacca aatgcacccat 60
ttcctgagac ttgctggcct ctccgttgag tccacttggc tttctgtcct ccacagctcc 120
attgccactg ttgatcacta gctttttctt ctgcccacac cttcttcgac tgttgactgc 180
aatgcaaaact gcaagaatca aagccaaggc caagagggat gccaaagatga tcagccattc 240
tggaatttgg ggtgtcctta taggaccaga ggttggtgtt gctccacctt cttgactccc 300
atgtgagacc tcggccgcga ccacgctaag ccgaattcca gcacactggc ggcccgttac 360
tagtgatcc g          371

```

```

<210> 146
<211> 355
<212> DNA
<213> Homo sapiens

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```

<400> 146
ggtcctcgt cctcttccca gaggtgtcgg ggcttggccc cagcctccat cttcgtctct 60
caggatggcg agtagcagcg gctccaaggc tgaattcatt gtcggaggga aatataaaact 120
ggtacggaag atcgggtctg gctccttcgg ggacatctat ttggcgatca acatcaccaa 180
cggcgaggaa gtggcagtga agctagaatc tcagaaggcc aggcattccc agttgctgta 240
cgagagcaag ctctataaga ttcttcaagg tggggttggc atccccaca tacggtggta 300
tggtcaggaa aaagactaca atgtactagt catggtatct ctgggaccta gcctc          355

```

```

<210> 147
<211> 355
<212> DNA
<213> Homo sapiens

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```

<400> 147
ggtctgttac aaaatgaaga cagacaacac aacatttact ctgtggagat atcctactca 60
tactatgcac gtgctgtgat tttgaacata actcgtccca aaaacttgtc acgatcatcc 120
tgacttttta ggttggctga tccatcaatc ttgcactcaa ctgttacttc tttcccagtg 180
ttggttaggag caaagctgac ctgaacagca accaatggct gtagataccc aacatgcagt 240
tttttcccat aatatgggaa atattttaag tctatcattc cattatgagg ataaactgct 300
acatttggtg tatcttcatt ctttgaaaca caatctatcc ttggcactcc ttcag          355

```

```

<210> 148
<211> 369
<212> DNA
<213> Homo sapiens

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```

<400> 148
aggtctctct cccctctctc ctctcctgcc agccaagtga agacatgctt acttcccctt 60
caccttccct catgatgtgg gaagagtgtc gcaaccagc cctagccaac accgcatgag 120
agggagtgtg ccgagggcct ctgagaaggt ttctctcaca tctagaaaga agcgcttaag 180

```

```

atgtggcagc ccctcttctt caagtggctc ttgtcctgtt gccctgggag ttctcaaatt 240
gctgcagcag cctccatcca gcctgaggat gacatcaata cacagaggaa gaagagtcag 300
gaaaagatga gagaagttac agactctcct gggcgacccc gagagcttac cattcctcag 360
acttcttca                                     369

```

```

<210> 149
<211> 620
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 169, 171, 222, 472, 528, 559, 599
<223> n = A,T,C or G

```

```

<400> 149
actagtcaaa aatgctaaaa taatttgga gaaaatatTT ttttaagtagt gttatagttt 60
catgtttatc ttttattatg ttttgtgaag ttgtgtcttt tcactaatta cctatactat 120
gccaatatTT ctttatactc atccataaca tttatactac atttgtaana naatatgcac 180
gtgaaactta acactttata aggtaaaaat gaggtttcca anatttaata atctgatcaa 240
gttcttggtta tttccaaata gaatggactt ggtctgttaa gggctaagga gaagaggaag 300
ataagggttaa aagttgttaa tgaccaaaca ttctaaaaga aatgcaaaaa aaaagtttat 360
tttcaagcct tcgaactatt taaggaaagc aaaatcattt cctaaatgca tatcatttgt 420
gagaatttct cattaatatt ctgaatcatt catttcaacta aggctcatgt tnactccgat 480
atgtctctaa gaaagtacta tttcatggtc caaacctggt tgccatantt gggtaaaggc 540
tttcccttaa gtgtgaaant atttaaaatg aaattttcct ctttttaaaa attctttana 600
agggttaagg gtgttgggga                                     620

```

```

<210> 150
<211> 371
<212> DNA
<213> Homo sapiens

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```

<400> 150
ggtccgatca aaacctgcta cctccccaag actttactag tgccgataaa ctttctcaaa 60
gagcaaccag tatcacttcc ctgtttataa aacctctaac catctctttg ttctttgaac 120
atgctgaaaa ccacctggtc tgcatgtatg cccgaatttg yaattctttt ctctcaaagt 180
aaattttaat tttagggatt catttctata ttttcacata ttagtatta ttatttcctt 240
atatgtgtaa ggtgaaattt atgggtattg agtgtgcaag aaaatatatt tttaaagctt 300
tcatttttcc cccagtgaat gatthagaaat tttttatgta aatatacaga atgttttttc 360
ttacttttat a                                     371

```

```

<210> 151
<211> 4655
<212> DNA
<213> Homo sapiens

```

```

<400> 151
gggacttgag ttctgttatc ttcttaagta gattcatatt gtaagggctc cgggggtgggg 60
gggttgaggaa aatcctggag ccagaagaaa ggacagcagc attgatcaat cttacagcta 120
acatgttgta cctggaaaac aatgccaga ctcaatttag tgagccacag tacacgaacc 180
tggggtcctt gaacagcatg gaccagcaga ttcagaacgg ctccctcgcc accagtcctt 240
ataacacaga ccacgcgcag aacagcgtca cggcgcctc gccctacgca cagcccagct 300
ccaccttcga tgctctctct ccatcaccgc ccatccctc caacaccgac taccagggcc 360

```

cgcacagttt	cgacgtgtcc	ttccagcagt	cgagcaccgc	caagtcggcc	acctggacgt	420
attccactga	actgaagaaa	ctctactgcc	aaattgcaaa	gacatgcccc	atccagatca	480
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&lt;210&gt; 152

&lt;211&gt; 586

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 152

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Tyr Thr Asn Leu Gly Leu Leu Asn Ser Met Asp Gln Gln Ile Gln Asn
20      25      30
Gly Ser Ser Ser Thr Ser Pro Tyr Asn Thr Asp His Ala Gln Asn Ser
35      40      45
Val Thr Ala Pro Ser Pro Tyr Ala Gln Pro Ser Ser Thr Phe Asp Ala
50      55      60
Leu Ser Pro Ser Pro Ala Ile Pro Ser Asn Thr Asp Tyr Pro Gly Pro
65      70      75      80
His Ser Phe Asp Val Ser Phe Gln Gln Ser Ser Thr Ala Lys Ser Ala
85      90      95
Thr Trp Thr Tyr Ser Thr Glu Leu Lys Lys Leu Tyr Cys Gln Ile Ala
100     105     110
Lys Thr Cys Pro Ile Gln Ile Lys Val Met Thr Pro Pro Pro Gln Gly
115     120     125
Ala Val Ile Arg Ala Met Pro Val Tyr Lys Lys Ala Glu His Val Thr
130     135     140
Glu Val Val Lys Arg Cys Pro Asn His Glu Leu Ser Arg Glu Phe Asn
145     150     155     160
Glu Gly Gln Ile Ala Pro Ser Ser His Leu Ile Arg Val Glu Gly Asn
165     170     175
Ser His Ala Gln Tyr Val Glu Asp Pro Ile Thr Gly Arg Gln Ser Val
180     185     190
Leu Val Pro Tyr Glu Pro Pro Gln Val Gly Thr Glu Phe Thr Thr Val
195     200     205
Leu Tyr Asn Phe Met Cys Asn Ser Ser Cys Val Gly Gly Met Asn Arg
210     215     220
Arg Pro Ile Leu Ile Ile Val Thr Leu Glu Thr Arg Asp Gly Gln Val

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225					230					235				240	
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Glu	Leu	Val	Tyr	Leu	Pro	Val	Arg	Gly	Arg	Glu	Thr	Tyr	Glu	Met	Leu
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Val	Lys	Ile	Lys	Glu	Ser	Leu	Glu	Leu	Met	Gln	Tyr	Leu	Leu	Gln	His
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Ile	Pro	Asp	Gly	Met	Gly	Ala	Asn	Ile	Pro	Met	Met	Gly	Thr	His	Met
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Pro	Pro	Leu	Ser	Met	Pro	Ser	Thr	Ser	His	Cys	Thr	Pro	Pro	Pro	Pro
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Tyr	Pro	Thr	Asp	Cys	Ser	Ile	Val	Ser	Phe	Leu	Ala	Arg	Leu	Gly	Cys
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Gln	Ile	Glu	His	Tyr	Ser	Met	Asp	Asp	Leu	Ala	Ser	Leu	Lys	Ile	Pro
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Leu	His	Glu	Phe	Ser	Ser	Pro	Ser	His	Leu	Leu	Arg	Thr	Pro	Ser	Ser
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Ala	Ser	Thr	Val	Ser	Val	Gly	Ser	Ser	Glu	Thr	Arg	Gly	Glu	Arg	Val
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Ile	Asp	Ala	Val	Arg	Phe	Thr	Leu	Arg	Gln	Thr	Ile	Ser	Phe	Pro	Pro
545					550					555					560
Arg	Asp	Glu	Trp	Asn	Asp	Phe	Asn	Phe	Asp	Met	Asp	Ala	Arg	Arg	Asn
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Lys	Gln	Gln	Arg	Ile	Lys	Glu	Glu	Gly	Glu						
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&lt;210&gt; 153

&lt;211&gt; 2007

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 153

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<210> 154
<211> 2148
<212> DNA
<213> Homo sapiens

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<210> 155  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

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      20           25           30
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      35           40           45
Ala Ala Val Ser Ser Ile Phe Asn Ser Pro Glu Glu Phe Leu Gly Lys
      50           55           60
Ala Val Gly Leu Ser Ala Glu Ala Leu Thr Ile Gln Gln Tyr Ala Asp
      65           70           75           80
Val Leu Ser Lys Ala Leu Gly Lys Glu Val Arg Asp Ala Lys Ile Thr
      85           90           95
Pro Glu Ala Phe Glu Lys Leu Gly Phe Pro Ala Ala Lys Glu Ile Ala
      100          105          110
Asn Met Cys Arg Phe Tyr Glu Met Lys Pro Asp Arg Asp Val Asn Leu
      115          120          125
Thr His Gln Leu Asn Pro Lys Val Lys Ser Phe Ser Gln Phe Ile Ser
      130          135          140
Glu Asn Gln Gly Ala Phe Lys Gly Met
145          150

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<210> 156  
 <211> 128  
 <212> PRT

<213> Homo sapiens

<400> 156

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      20           25           30
Pro Met Gly Asp Val Pro Met Asp Gly Ile Ser Val Ala Asp Ile Gly
      35           40           45
Ala Ala Val Ser Ser Ile Phe Asn Ser Pro Glu Glu Phe Leu Gly Lys
      50           55           60
Ala Val Gly Leu Ser Ala Glu Ala Leu Thr Ile Gln Gln Tyr Ala Asp
65           70           75           80
Val Leu Ser Lys Ala Leu Gly Lys Glu Val Arg Asp Ala Lys Thr Ile
      85           90           95
Cys Ala Ile Asp Asp Gln Lys Thr Val Glu Glu Gly Phe Met Glu Asp
      100          105          110
Val Gly Leu Ser Trp Ser Leu Arg Glu His Asp His Val Ala Gly Ala
      115          120          125

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<210> 157

<211> 424

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 320, 322

<223> n = A,T,C or G

<400> 157

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tgct                                         424

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<210> 158

<211> 2099

<212> DNA

<213> Homo sapiens

<400> 158

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&lt;210&gt; 159

&lt;211&gt; 291

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 159

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Val Met Ile Leu Val Val Ala Ala Gln Glu Val Trp Gly Asp Glu Gln
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Glu Asp Phe Val Cys Asn Thr Leu Gln Pro Gly Cys Lys Asn Val Cys
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Tyr Asp His Phe Phe Pro Val Ser His Ile Arg Leu Trp Ala Leu Gln
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Leu Ile Phe Val Ser Thr Pro Ala Leu Leu Val Ala Met His Val Ala
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Tyr Tyr Arg His Glu Thr Thr Arg Lys Phe Arg Arg Gly Glu Lys Arg
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 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Pro Gln Val Pro Glu Asn Gln Asn Leu Ile Ser Asn Ile Lys Glu Met  
 50 55 60

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Thr	Trp	Gln	Ala	Ser	Gly	Pro	Pro	Glu	Ile	Ile	Leu	Phe	Asp	Pro	Asp		
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Glu	His	Gln	Pro	Asn	Gly	Glu	Thr	His	Glu	Ser	His	Arg	Ile	Tyr	Val		
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 <212> DNA  
 <213> Homo sapiens

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<210> 165  
 <211> 177  
 <212> PRT  
 <213> Homo sapiens

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Arg Leu Lys Arg Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly
 35          40          45
Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile
 50          55          60
Ala Glu Ile His Thr Ala Glu Ile Arg Ala Thr Ser Glu Val Ser Pro
 65          70          75          80
Asn Ser Lys Pro Ser Pro Asn Thr Lys Asn His Pro Val Arg Phe Gly
          85          90          95
Ser Asp Asp Glu Gly Arg Tyr Leu Thr Gln Glu Thr Asn Lys Val Glu
          100          105          110
Thr Tyr Lys Glu Gln Pro Leu Lys Thr Pro Gly Lys Lys Lys Lys Gly
          115          120          125
Lys Pro Gly Lys Arg Lys Glu Gln Glu Lys Lys Lys Arg Arg Thr Arg
          130          135          140
Ser Ala Trp Leu Asp Ser Gly Val Thr Gly Ser Gly Leu Glu Gly Asp
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His

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<210> 166

<211> 177  
 <212> PRT  
 <213> Homo sapiens

<400> 166  
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 Arg Leu Lys Arg Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly  
 35 40 45  
 Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile  
 50 55 60  
 Ala Glu Ile His Thr Ala Glu Ile Arg Ala Thr Ser Glu Val Ser Pro  
 65 70 75 80  
 Asn Ser Lys Pro Ser Pro Asn Thr Lys Asn His Pro Val Arg Phe Gly  
 85 90 95  
 Ser Asp Asp Glu Gly Arg Tyr Leu Thr Gln Glu Thr Asn Lys Val Glu  
 100 105 110  
 Thr Tyr Lys Glu Gln Pro Leu Lys Thr Pro Gly Lys Lys Lys Lys Gly  
 115 120 125  
 Lys Pro Gly Lys Arg Lys Glu Gln Glu Lys Lys Lys Arg Arg Thr Arg  
 130 135 140  
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 165 170 175  
 His

<210> 167  
 <211> 3362  
 <212> DNA  
 <213> Homo sapiens

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 aatgataact gaagcttcat tttacctatt taatgctacc aagagaagag tatttttcag 300  
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 tccatacacc ctacaatata gaggggtgtgg aaaagaggga aaatacattc atttcacacc 480  
 taatttctta ctgaatgata acttaacagc tggctacgga tcacgaggcc gagtgtttgt 540  
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<210> 168  
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 <212> DNA  
 <213> Homo sapiens

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<210> 169  
 <211> 592  
 <212> PRT  
 <213> Homo sapiens

<400> 169  
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 Val Gln Leu Gln Asp Asn Gly Tyr Asn Gly Leu Leu Ile Ala Ile Asn  
 35 40 45  
 Pro Gln Val Pro Glu Asn Gln Asn Leu Ile Ser Asn Ile Lys Glu Met

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Ile 65	Thr	Glu	Ala	Ser	Phe 70	Tyr	Leu	Phe	Asn	Ala 75	Thr	Lys	Arg	Arg	Val 80	
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Asn	Asn	Ser	Lys 100	Ile	Lys	Gln	Glu	Ser	Tyr 105	Glu	Lys	Ala	Asn	Val 110	Ile	
Val	Thr	Asp 115	Trp	Tyr	Gly	Ala	His	Gly	Asp 120	Asp	Pro	Tyr	Thr	Leu	Gln	
Tyr	Arg 130	Gly	Cys	Gly	Lys	Glu	Gly	Lys	Tyr 135	Ile	His	Phe	Thr	Pro	Asn	
Phe 145	Leu	Leu	Asn	Asp	Asn 150	Leu	Thr	Ala	Gly	Tyr 155	Gly	Ser	Arg	Gly	Arg 160	
Val	Phe	Val	His 165	Glu	Trp	Ala	His	Leu	Arg 170	Trp	Gly	Val	Phe	Asp	Glu 175	
Tyr	Asn	Asn	Asp 180	Lys	Pro	Phe	Tyr	Ile	Asn 185	Gly	Gln	Asn	Gln	Ile	Lys	
Val	Thr	Arg 195	Cys	Ser	Ser	Asp	Ile	Thr	Gly 200	Ile	Phe	Val	Cys	Glu	Lys	
Gly	Pro 210	Cys	Pro	Gln	Glu	Asn	Cys	Ile	Ile 215	Ser	Lys	Leu	Phe	Lys	Glu	
Gly 225	Cys	Thr	Phe	Ile	Tyr 230	Asn	Ser	Thr	Gln	Asn 235	Ala	Thr	Ala	Ser	Ile 240	
Met	Phe	Met	Gln 245	Ser	Leu	Ser	Ser	Val	Val 250	Glu	Phe	Cys	Asn	Ala	Ser 255	
Thr	His	Asn	Gln 260	Glu	Ala	Pro	Asn	Leu	Gln 265	Asn	Gln	Met	Cys	Ser	Leu	
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Phe	Pro 290	Met	Asn	Gly	Thr	Glu	Leu	Pro	Pro 295	Pro	Pro	Thr	Phe	Ser	Leu	
Val 305	Glu	Ala	Gly	Asp	Lys 310	Val	Val	Cys	Leu	Val 315	Leu	Asp	Val	Ser	Ser 320	
Lys	Met	Ala	Glu	Ala 325	Asp	Arg	Leu	Leu	Gln 330	Leu	Gln	Gln	Ala	Ala	Glu	
Phe	Tyr	Leu	Met 340	Gln	Ile	Val	Glu	Ile	His 345	Thr	Phe	Val	Gly	Ile	Ala	
Ser	Phe	Asp 355	Ser	Lys	Gly	Glu	Ile	Arg	Ala 360	Gln	Leu	His	Gln	Ile	Asn	
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Val	Leu	Ser 435	Ser	Gly	Ser	Thr	Ile	His	Ser 440	Ile	Ala	Leu	Gly	Ser	Ser	
Ala	Ala 450	Pro	Asn	Leu	Glu	Glu	Leu	Ser	Arg	Leu	Thr	Gly	Gly	Leu	Lys	
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Thr	Val	Thr	Val	Asp	Asn	Thr	Val	Gly	Asn	Asp	Thr	Met	Phe	Leu	Val		
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Thr	Trp	Gln	Ala	Ser	Gly	Pro	Pro	Glu	Ile	Ile	Leu	Phe	Asp	Pro	Asp		
				530				535				540					
Gly	Arg	Lys	Tyr	Tyr	Thr	Asn	Asn	Phe	Ile	Thr	Asn	Leu	Thr	Phe	Arg		
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Thr	Ala	Ser	Leu	Trp	Ile	Pro	Gly	Thr	Ala	Lys	Pro	Gly	His	Trp	Thr		
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<210> 170  
 <211> 791  
 <212> PRT  
 <213> Homo sapiens

<400> 170

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Val	Gln	Leu	Gln	Asp	Asn	Gly	Tyr	Asn	Gly	Leu	Leu	Ile	Ala	Ile	Asn		
		35				40						45					
Pro	Gln	Val	Pro	Glu	Asn	Gln	Asn	Leu	Ile	Ser	Asn	Ile	Lys	Glu	Met		
	50				55					60							
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65				70					75					80			
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Phe	Leu	Leu	Asn	Asp	Asn	Leu	Thr	Ala	Gly	Tyr	Gly	Ser	Arg	Gly	Arg		
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Tyr	Asn	Asn	Asp	Lys	Pro	Phe	Tyr	Ile	Asn	Gly	Gln	Asn	Gln	Ile	Lys		
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Met	Phe	Met	Gln	Ser	Leu	Ser	Ser	Val	Val	Glu	Phe	Cys	Asn	Ala	Ser		
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Thr	His	Asn	Gln	Glu	Ala	Pro	Asn	Leu	Gln	Asn	Gln	Met	Cys	Ser	Leu		

			260					265				270			
Arg	Ser	Ala	Trp	Asp	Val	Ile	Thr	Asp	Ser	Ala	Asp	Phe	His	His	Ser
		275					280					285			
Phe	Pro	Met	Asn	Gly	Thr	Glu	Leu	Pro	Pro	Pro	Pro	Thr	Phe	Ser	Leu
	290					295					300				
Val	Glu	Ala	Gly	Asp	Lys	Val	Val	Cys	Leu	Val	Leu	Asp	Val	Ser	Ser
305					310						315				320
Lys	Met	Ala	Glu	Ala	Asp	Arg	Leu	Leu	Gln	Leu	Gln	Gln	Ala	Ala	Glu
				325					330					335	
Phe	Tyr	Leu	Met	Gln	Ile	Val	Glu	Ile	His	Thr	Phe	Val	Gly	Ile	Ala
			340					345					350		
Ser	Phe	Asp	Ser	Lys	Gly	Glu	Ile	Arg	Ala	Gln	Leu	His	Gln	Ile	Asn
		355					360					365			
Ser	Asn	Asp	Asp	Arg	Lys	Leu	Leu	Val	Ser	Tyr	Leu	Pro	Thr	Thr	Val
	370					375					380				
Ser	Ala	Lys	Thr	Asp	Ile	Ser	Ile	Cys	Ser	Gly	Leu	Lys	Lys	Gly	Phe
385					390					395					400
Glu	Val	Val	Glu	Lys	Leu	Asn	Gly	Lys	Ala	Tyr	Gly	Ser	Val	Met	Ile
				405					410					415	
Leu	Val	Thr	Ser	Gly	Asp	Asp	Lys	Leu	Leu	Gly	Asn	Cys	Leu	Pro	Thr
			420					425					430		
Val	Leu	Ser	Ser	Gly	Ser	Thr	Ile	His	Ser	Ile	Ala	Leu	Gly	Ser	Ser
		435					440					445			
Ala	Ala	Pro	Asn	Leu	Glu	Glu	Leu	Ser	Arg	Leu	Thr	Gly	Gly	Leu	Lys
	450					455					460				
Phe	Phe	Val	Pro	Asp	Ile	Ser	Asn	Ser	Asn	Ser	Met	Ile	Asp	Ala	Phe
465					470					475					480
Ser	Arg	Ile	Ser	Ser	Gly	Thr	Gly	Asp	Ile	Phe	Gln	Gln	His	Ile	Gln
				485				490						495	
Leu	Glu	Ser	Thr	Gly	Glu	Asn	Val	Lys	Pro	His	His	Gln	Leu	Lys	Asn
			500					505					510		
Thr	Val	Thr	Val	Asp	Asn	Thr	Val	Gly	Asn	Asp	Thr	Met	Phe	Leu	Val
		515					520					525			
Thr	Trp	Gln	Ala	Ser	Gly	Pro	Glu	Ile	Ile	Leu	Phe	Asp	Pro	Asp	
	530					535				540					
Gly	Arg	Lys	Tyr	Tyr	Thr	Asn	Asn	Phe	Ile	Thr	Asn	Leu	Thr	Phe	Arg
545					550					555					560
Thr	Ala	Ser	Leu	Trp	Ile	Pro	Gly	Thr	Ala	Lys	Pro	Gly	His	Trp	Thr
				565					570					575	
Tyr	Thr	Leu	Asn	Asn	Thr	His	His	Ser	Leu	Gln	Ala	Leu	Lys	Val	Thr
			580					585					590		
Val	Thr	Ser	Arg	Ala	Ser	Asn	Ser	Ala	Val	Pro	Pro	Ala	Thr	Val	Glu
		595					600					605			
Ala	Phe	Val	Glu	Arg	Asp	Ser	Leu	His	Phe	Pro	His	Pro	Val	Met	Ile
	610														

690	695	700
Pro Gly Ser His Ala Met Tyr Val Pro Gly Tyr Thr Ala Asn Gly Asn		
705	710	715
Ile Gln Met Asn Ala Pro Arg Lys Ser Val Gly Arg Asn Glu Glu Glu		720
	725	730
Arg Lys Trp Gly Phe Ser Arg Val Ser Ser Gly Gly Ser Phe Ser Val		735
	740	745
Leu Gly Val Pro Ala Gly Pro His Pro Asp Val Phe Pro Pro Cys Lys		750
	755	760
Ile Ile Asp Leu Glu Ala Val Asn Arg Arg Gly Ile Asp Pro Ile Leu		765
	770	775
Asp Ser Thr Trp Arg Arg Leu		780
785	790	

<210> 171  
 <211> 1491  
 <212> DNA  
 <213> Homo sapiens

<400> 171

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tgagaaggt	tctctcacat	ctagaaagaa	gcgcttaaga	tgtggcagcc	cctcttcttc	180
aagtggctct	tgctctgttg	ccctgggagt	tctcaaattg	ctgcagcagc	ctccacccag	240
cctgaggatg	acatcaatac	acagaggaag	aagagtcagg	aaaagatgag	agaagttaca	300
gactctcctg	ggcgaccccg	agagcttacc	attcctcaga	cttcttcaca	tggtgctaac	360
agatttggtc	ctaaaagtaa	agctctagag	gccgtcaaat	tggcaataga	agccgggttc	420
caccatattg	attctgcaca	tgtttacaat	aatgaggagc	aggttggact	ggccatccga	480
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<210> 172  
 <211> 364  
 <212> PRT  
 <213> Homo sapiens

<400> 172  
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Asn Thr Gln Arg Lys Lys Ser Gln Glu Lys Met Arg Glu Val Thr Asp			
35	40	45	
Ser Pro Gly Arg Pro Arg Glu Leu Thr Ile Pro Gln Thr Ser Ser His			
50	55	60	
Gly Ala Asn Arg Phe Val Pro Lys Ser Lys Ala Leu Glu Ala Val Lys			
65	70	75	80
Leu Ala Ile Glu Ala Gly Phe His His Ile Asp Ser Ala His Val Tyr			
85	90	95	
Asn Asn Glu Glu Gln Val Gly Leu Ala Ile Arg Ser Lys Ile Ala Asp			
100	105	110	
Gly Ser Val Lys Arg Glu Asp Ile Phe Tyr Thr Ser Lys Leu Trp Ser			
115	120	125	
Asn Ser His Arg Pro Glu Leu Val Arg Pro Ala Leu Glu Arg Ser Leu			
130	135	140	
Lys Asn Leu Gln Leu Asp Tyr Val Asp Leu Tyr Leu Ile His Phe Pro			
145	150	155	160
Val Ser Val Lys Pro Gly Glu Glu Val Ile Pro Lys Asp Glu Asn Gly			
165	170	175	
Lys Ile Leu Phe Asp Thr Val Asp Leu Cys Ala Thr Trp Glu Ala Met			
180	185	190	
Glu Lys Cys Lys Asp Ala Gly Leu Ala Lys Ser Ile Gly Val Ser Asn			
195	200	205	
Phe Asn His Arg Leu Leu Glu Met Ile Leu Asn Lys Pro Gly Leu Lys			
210	215	220	
Tyr Lys Pro Val Cys Asn Gln Val Glu Cys His Pro Tyr Phe Asn Gln			
225	230	235	240
Arg Lys Leu Leu Asp Phe Cys Lys Ser Lys Asp Ile Val Leu Val Ala			
245	250	255	
Tyr Ser Ala Leu Gly Ser His Arg Glu Glu Pro Trp Val Asp Pro Asn			
260	265	270	
Ser Pro Val Leu Leu Glu Asp Pro Val Leu Cys Ala Leu Ala Lys Lys			
275	280	285	
His Lys Arg Thr Pro Ala Leu Ile Ala Leu Arg Tyr Gln Leu Gln Arg			
290	295	300	
Gly Val Val Val Leu Ala Lys Ser Tyr Asn Glu Gln Arg Ile Arg Gln			
305	310	315	320
Asn Val Gln Val Phe Glu Phe Gln Leu Thr Ser Glu Glu Met Lys Ala			
325	330	335	
Ile Asp Gly Leu Asn Arg Asn Val Arg Tyr Leu Thr Leu Asp Ile Phe			
340	345	350	
Ala Gly Pro Pro Asn Tyr Pro Phe Ser Asp Glu Tyr			
355	360		

&lt;210&gt; 173

&lt;211&gt; 1988

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 173

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cttacataat gaaaaccaat tcatttttaa tatcagatta ttattttgta agttgtggaa 1920
aaagctaatt gtagttttca ttatgaagtt ttcccaataa accaggtatt ctaaaaaaaa 1988
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<210> 174
<211> 238
<212> PRT
<213> Homo sapiens

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<400> 174
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20      25      30
Leu Arg Ser Ala Pro Leu Gly Pro Ala Pro Pro Val Asn Met Ile Arg
35      40      45
Cys Gly Leu Ala Cys Glu Arg Cys Arg Trp Ile Leu Pro Leu Leu Leu
50      55      60
Leu Ser Ala Ile Ala Phe Asp Ile Ile Ala Leu Ala Gly Arg Gly Trp
65      70      75      80
Leu Gln Ser Ser Asp His Gly Gln Thr Ser Ser Leu Trp Trp Lys Cys
85      90      95
Ser Gln Glu Gly Gly Gly Ser Gly Ser Tyr Glu Glu Gly Cys Gln Ser
100     105     110

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Leu Met Glu Tyr Ala Trp Gly Arg Ala Ala Ala Ala Met Leu Phe Cys  
 115 120 125  
 Gly Phe Ile Ile Leu Val Ile Cys Phe Ile Leu Ser Phe Phe Ala Leu  
 130 135 140  
 Cys Gly Pro Gln Met Leu Val Phe Leu Arg Val Ile Gly Gly Leu Leu  
 145 150 155 160  
 Ala Leu Ala Ala Val Phe Gln Ile Ile Ser Leu Val Ile Tyr Pro Val  
 165 170 175  
 Lys Tyr Thr Gln Thr Phe Thr Leu His Ala Asn Pro Ala Val Thr Tyr  
 180 185 190  
 Ile Tyr Asn Trp Ala Tyr Gly Phe Gly Trp Ala Ala Thr Ile Ile Leu  
 195 200 205  
 Ile Gly Cys Ala Phe Phe Phe Cys Cys Leu Pro Asn Tyr Glu Asp Asp  
 210 215 220  
 Leu Leu Gly Asn Ala Lys Pro Arg Tyr Phe Tyr Thr Ser Ala  
 225 230 235

<210> 175  
 <211> 4181  
 <212> DNA  
 <213> Homo sapiens

<220>  
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 4036, 4056, 4062, 4080, 4088, 4115  
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 ttactgtgtt tgtgtatttt aaaggcgaga agacgagggg aacaaaacca gctggatcca 180  
 tccatcacgg tgggtgggtt taatttttctg ttttttctcg ttattttttt ttaaacaacc 240  
 actcttcaca atgaacaaac tgtatatcgg aaacctcagc gagaacgccg cccctcggga 300  
 cctagaaagt atcttcaagg acgccaagat cccggtgtcg ggacccttcc tggatgaagac 360  
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 ggaaactgca gttgtaaagt taacctatc cagtaaggac caagctagac aagcactaga 660  
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<210> 176

<211> 579

<212> PRT

<213> Homo sapiens

<400> 176

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Phe Leu Val Lys Thr Gly Tyr Ala Phe Val Asp Cys Pro Asp Glu Ser			
	35	40	45
Trp Ala Leu Lys Ala Ile Glu Ala Leu Ser Gly Lys Ile Glu Leu His			
	50	55	60
Gly Lys Pro Ile Glu Val Glu His Ser Val Pro Lys Arg Gln Arg Ile			
65	70	75	80
Arg Lys Leu Gln Ile Arg Asn Ile Pro Pro His Leu Gln Trp Glu Val			
	85	90	95
Leu Asp Ser Leu Leu Val Gln Tyr Gly Val Val Glu Ser Cys Glu Gln			
	100	105	110
Val Asn Thr Asp Ser Glu Thr Ala Val Val Asn Val Thr Tyr Ser Ser			
	115	120	125
Lys Asp Gln Ala Arg Gln Ala Leu Asp Lys Leu Asn Gly Phe Gln Leu			
	130	135	140
Glu Asn Phe Thr Leu Lys Val Ala Tyr Ile Pro Asp Glu Met Ala Ala			
145	150	155	160
Gln Gln Asn Pro Leu Gln Gln Pro Arg Gly Arg Arg Gly Leu Gly Gln			
	165	170	175
Arg Gly Ser Ser Arg Gln Gly Ser Pro Gly Ser Val Ser Lys Gln Lys			
	180	185	190
Pro Cys Asp Leu Pro Leu Arg Leu Leu Val Pro Thr Gln Phe Val Gly			
	195	200	205
Ala Ile Ile Gly Lys Glu Gly Ala Thr Ile Arg Asn Ile Thr Lys Gln			
	210	215	220
Thr Gln Ser Lys Ile Asp Val His Arg Lys Glu Asn Ala Gly Ala Ala			
225	230	235	240
Glu Lys Ser Ile Thr Ile Leu Ser Thr Pro Glu Gly Thr Ser Ala Ala			
	245	250	255
Cys Lys Ser Ile Leu Glu Ile Met His Lys Glu Ala Gln Asp Ile Lys			
	260	265	270
Phe Thr Glu Glu Ile Pro Leu Lys Ile Leu Ala His Asn Asn Phe Val			
	275	280	285
Gly Arg Leu Ile Gly Lys Glu Gly Arg Asn Leu Lys Lys Ile Glu Gln			
	290	295	300
Asp Thr Asp Thr Lys Ile Thr Ile Ser Pro Leu Gln Glu Leu Thr Leu			
305	310	315	320
Tyr Asn Pro Glu Arg Thr Ile Thr Val Lys Gly Asn Val Glu Thr Cys			
	325	330	335
Ala Lys Ala Glu Glu Glu Ile Met Lys Lys Ile Arg Glu Ser Tyr Glu			
	340	345	350
Asn Asp Ile Ala Ser Met Asn Leu Gln Ala His Leu Ile Pro Gly Leu			
	355	360	365
Asn Leu Asn Ala Leu Gly Leu Phe Pro Pro Thr Ser Gly Met Pro Pro			
	370	375	380
Pro Thr Ser Gly Pro Pro Ser Ala Met Thr Pro Pro Tyr Pro Gln Phe			
385	390	395	400
Glu Gln Ser Glu Thr Glu Thr Val His Gln Phe Ile Pro Ala Leu Ser			
	405	410	415
Val Gly Ala Ile Ile Gly Lys Gln Gly Gln His Ile Lys Gln Leu Ser			
	420	425	430
Arg Phe Ala Gly Ala Ser Ile Lys Ile Ala Pro Ala Glu Ala Pro Asp			

435	440	445
Ala Lys Val Arg Met Val Ile Ile Thr Gly Pro Pro Glu Ala Gln Phe		
450	455	460
Lys Ala Gln Gly Arg Ile Tyr Gly Lys Ile Lys Glu Glu Asn Phe Val		
465	470	475
Ser Pro Lys Glu Glu Val Lys Leu Glu Ala His Ile Arg Val Pro Ser		
485	490	495
Phe Ala Ala Gly Arg Val Ile Gly Lys Gly Gly Lys Thr Val Asn Glu		
500	505	510
Leu Gln Asn Leu Ser Ser Ala Glu Val Val Val Pro Arg Asp Gln Thr		
515	520	525
Pro Asp Glu Asn Asp Gln Val Val Val Lys Ile Thr Gly His Phe Tyr		
530	535	540
Ala Cys Gln Val Ala Gln Arg Lys Ile Gln Glu Ile Leu Thr Gln Val		
545	550	555
Lys Gln His Gln Gln Gln Lys Ala Leu Gln Ser Gly Pro Pro Gln Ser		
565	570	575
Arg Arg Lys		

<210> 177  
 <211> 401  
 <212> DNA  
 <213> Homo sapiens

<400> 177

atgccccgta	aatgtcttca	gtgttcttca	gggtagttgg	gatctcaaaa	gatttggttc	60
agatccaaac	aaatacacat	tctgtgtttt	agctcagtgt	tttctaataa	aagaaactgc	120
cacacagcaa	aaaattgttt	actttgttgg	acaaaccaa	tcagttctca	aaaaatgacc	180
ggtgcttata	aaaagttata	aatatcgagt	agctctaaaa	caaaccacct	gaccaagagg	240
gaagtgaagt	tgtgcttagt	atttacattg	gatgccagtt	ttgtaatcac	tgacttatgt	300
gcaaactggt	gcagaaattc	tataaactct	ttgctgtttt	tgataacctg	tttttggttc	360
attttgtttt	gttttgtaaa	aatgataaaa	cttcagaaaa	t		401

<210> 178  
 <211> 561  
 <212> DNA  
 <213> Homo sapiens

<400> 178

acgcctttca	agggtgtacg	caaagcactc	attgataccc	ttttggatgg	ctatgaaaca	60
gccgcctatg	ggacaggggt	ctttggccag	aatgagtacc	tacgctatca	ggaggccctg	120
agtgaagtgg	ccactgcggt	taaagcacga	attgggagct	ctcagcgaca	tcaccagtca	180
gcagccaaag	acctaactca	gtcccctgag	gtctcccca	caaccatcca	ggtgacatac	240
ctcccctcca	gtcagaagag	taaacgtgcc	aagcacttcc	ttgaattgaa	gagctttaag	300
gataactata	acacattgga	gagtactctg	tgacggagct	gaaggactct	tgccgtagat	360
taagccagtc	agttgcaatg	tgcaagacag	gctgcttgcc	gggccgccct	cgggaacatct	420
ggcccagcag	gccagactg	tatccatcca	agttcccgtt	gtatccagag	ttcttagagc	480
ttgtgtctaa	agggtaattc	cccaaccctt	ccttatgagc	atttttagaa	cattgggctaa	540
gactattttc	ccccagtagc	g				561

<210> 179  
 <211> 521

<212> DNA  
 <213> Homo sapiens

<400> 179  
 cccaacgcgt ttgcaaatat .tcccctggta gcctacttcc ttacccccga atattggtaa 60  
 gatcgagcaa tggcttcagg acatgggttc tcttctcctg tgatcattca agtgctcact 120  
 gcatgaagac tggcttgtct cagtgtttca acctcaccag ggctgtctct tgggccacac 180  
 ctgcctccct gttagtgccg tatgacagcc cccatcaaat gaccttggcc aagtcacggg 240  
 ttctctgtgg tcaaggttgg ttggctgatt ggtggaaaagt aggggtggacc aaaggaggcc 300  
 acgtgagcag tcagcaccag ttctgcacca gcagcgctc cgtcctagtg ggtgttcctg 360  
 tttctcctgg ccctgggtgg gctagggcct gattcgggaa gatgcctttg caggaggagg 420  
 aggataagtg ggatctacca attgattctg gcaaaaacaat ttctaagatt tttttgcttt 480  
 atgtgggaaa cagatctaaa tctcatttta tgctgtattt t 521

<210> 180  
 <211> 417  
 <212> DNA  
 <213> Homo sapiens

<400> 180  
 ggtggaattc gccgaagatg gcggaggtgc aggtcctggt gcttgatggt cgaggccatc 60  
 tcttgggccg cctggcgcc atcgtggcta aacaggact gctgggccg aagggtgggtg 120  
 tcgtacgctg tgaaggcatc aacatttctg gcaatttcta cagaaacaag ttgaagtacc 180  
 tggctttcct ccgcaagcgg atgaacacca acccttccc aggccctac cacttccggg 240  
 cccccagccg catcttctgg cggaccgtgc gaggtatgct gccccacaaa accaagcgag 300  
 gccaggccgc tctggaccgt ctcaaggtgt ttgacggcat cccaccgcc tacgacaaga 360  
 aaaagcggat ggtggttctt gctgccctca aggtcgtgcg tctgaagcct acaagaa 417

<210> 181  
 <211> 283  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 35  
 <223> n = A,T,C or G

<400> 181  
 gatttcttct aaataggatg taaaacttct ttcanattac tcttcctcag tcttgcctgc 60  
 caagaactca agtgtaactg tgataaaata acctttcca ggtatattgg caggatatgtg 120  
 tgtaatctca gaatacacag gtgacataga tatgatatga caactggtaa tgggtggattc 180  
 atttacattg ttacacttc tatgaccagg ccttaaggga aggtcagttt tttaaaaaac 240  
 caagtagtgt cttcctacct atctccagat acatgtcaaa aaa 283

<210> 182  
 <211> 401  
 <212> DNA  
 <213> Homo sapiens

<400> 182  
 atattcttgc tgcttatgca gctgacattg ttgccctccc taaagcaacc aagtagcctt 60  
 tatttccac agtgaaagaa aacgctggcc tatcagttac attacaaaag gcagatttca 120  
 agaggattga gtaagtagtt ggatggcttt cataaaaaaca agaattcaag aagaggattc 180

```

atgctttaag aaacatttgt tatacattcc tcacaaatta tacctgggat aaaaactatg 240
tagcaggcag tgtgttttcc ttccatgtct ctctgcacta cctgcagtgt gtcctctgag 300
gctgcaagtc tgtcctatct gaattcccag cagaagcact aagaagctcc accctatcac 360
ctagcagata aaactatggg gaaaacttaa atctgtgcat a 401

```

```

<210> 183
<211> 366
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 325
<223> n = A,T,C or G

```

```

<400> 183
accgtgtcca agttttttaga acccttggtta gccagaccga ggtgtcctgg tcaccgtttc 60
accatcatgc tttgatgttc cctgtctttt ctctcttctg ctctcaagag caaagggttaa 120
tttaaggaca aagatgaagt cactgtaaac taatctgtca ttgtttttac cttccttttc 180
tttttcagtg cagaaattaa aagtaagtat aaagcaccgt gattgggagt gtttttgcgt 240
gtgtcggaat cactggtaaa tgttggctga gaacaatccc tccccttgca cttgtgaaaa 300
cactttgagc gctttaagag attancctga gaaataatta aatatctttt ctcttcaaaa 360
aaaaaa 366

```

```

<210> 184
<211> 370
<212> DNA
<213> Homo sapiens

```

```

<400> 184
tcttacttca aaagaaaaat aaacataaaa aataagttgc tggttcctaa caggaaaaat 60
tttaataatt gtactgagag aaactgctta cgtacacatt gcagatcaaa tatttggagt 120
taaaatgtta gtctacatag atgggtgatt gtaactttat tgccattaaa agatttcaaa 180
ttgcattcat gcttctgtgt acacataatg aaaaatgggc aaataatgaa gatctctcct 240
tcagtctgct ctgtttaatt ctgctgtctg ctcttctcta atgctgcgtc cctaattgta 300
cacagtttag tgatatctag gagtataaag ttgtcgccca tcaataaaaa tcacaaagtt 360
ggtttaaaaa 370

```

```

<210> 185
<211> 107
<212> DNA
<213> Homo sapiens

```

```

<400> 185
ctcatattat tttccttttg agaaattgga aactotttct gttgctatta tattaataaa 60
gttggtgttt attttctggt agtcaccttc cccatttaaa aaaaaaa 107

```

```

<210> 186
<211> 309
<212> DNA
<213> Homo sapiens

```

```

<400> 186
gaaaggatgg ctctggttgc cacagagctg ggacttcatg ttcttctaga gagggccaca 60

```

```

agagggccac aggggtggcc gggagttgtc agctgatgcc tgctgagagg caggaattgt 120
gccagtgaat gacagtcatt agggagtgtc tcttcttggg gaggaagaa ggtagagcct 180
ttctgtctga atgaaaggcc aaggctacag tacagggccc cgccccagcc aggggtgtta 240
tgccacgta gtggaggcct ctggcagatc ctgcattcca aggtcactgg actgtacgtt 300
tttatggtt                                     309

```

```

<210> 187
<211> 477
<212> DNA
<213> Homo sapiens

```

```

<400> 187
ttcagtccta gcaagaagcg agaattctga gatcctccag aaagtcgagc agcaccacc 60
tccaacctcg ggccagtgtc ttcaggcttt actggggacc tgcgagctgg cctaattgtg 120
tggcctgcaa gccaggccat ccctggggcg cacagacgag ctccgagcca ggtcaggcct 180
cggaggccac aagctcagcc tcaggcccag gcaactgattg tggcagaggg gccactacc 240
aaggtctagc taggcccagg acctagttac ccagacagtg agaagcccct ggaaggcaga 300
aaagttggga gcatggcaga cagggaaggg aaacattttc agggaaaaga catgtatcac 360
atgtcttcag aagcaagtca ggtttcatgt aaccgagtgt cctcttgctg gtccaaaagt 420
agcccagggc tgtagcacag gcttcacagt gattttgtgt tcagccgtga gtcacac 477

```

```

<210> 188
<211> 220
<212> DNA
<213> Homo sapiens

```

```

<400> 188
taaatatggt agatattaat attcctctta gatgaccagt gattccaatt gtcccaagtt 60
ttaaataagt accctgtgag tatgagataa attagtgaca atcagaacaa gtttcagtat 120
cagatgttca agaggaagtt gctattgcat tgattttaat atttgtacat aaacactgat 180
ttttttgagc attattttgt atttgtttga ctttaatacc 220

```

```

<210> 189
<211> 417
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 76, 77
<223> n = A,T,C or G

```

```

<400> 189
accatcttga cagaggatac atgctcccaa aacgtttgtt accacactta aaaatcactg 60
ccatcattaa gcatcnnttt caaaattata gccattcatg atttactttt tccagatgac 120
tatcattatt ctagtccttt gaatttgtaa ggggaaaaaa aacaaaaaca aaaacttacg 180
atgcactttt ctccagcaca tcagatttca aattgaaaat taaagacatg ctatggtaat 240
gcacttgcta gtactacaca ctttgtacaa caaaaaacag aggcaagaaa caacggaaag 300
agaaaagcct tcctttgttg gcccttaaac tgagtcaaga tctgaaatgt agagatgac 360
tctgacgata cctgtatggt cttattgtgt aaataaaatt gctggtatga aatgaca 417

```

```

<210> 190
<211> 497
<212> DNA

```

<213> Homo sapiens

<400> 190

```
gcactgcggc gctctcccg tccgcgggtgg ttgctgctgc tgccgctgct gctgggcctg 60
aacgcaggag ctgtcattga ctggcccaca gaggagggca aggaagtatg ggattatgtg 120
acggtccgca aggatgccta catgttcttg tggctctatt atgccaccaa ctctgcaag 180
aacttctcag aactgcccct ggtcatgttg cttcaggcg gtccaggcg ttctagcact 240
ggatttgga aacttgagga aattgggccc cttgacagt atctcaaacc acggaaaacc 300
acctggctcc aggtgccag tctctatatt gtggataatc ccgtgggcac tgggttcagt 360
tatgtgaatg gtagtggtgc ctatgccaa gacctggcta tgggtggctc agacatgatg 420
gttctcctga agaccttctt cagttgccac aaagaattcc agacagttcc attctacatt 480
ttctcagagt cctatgg                                     497
```

<210> 191

<211> 175

<212> DNA

<213> Homo sapiens

<400> 191

```
atgttgaata ttttgcttat taactttggt tattgtcttc tccctcgatt agaataattag 60
ctacttgagt acaaggattt gagcctgtta cattcactgc tgaattttag gctcctggaa 120
gatacccagc attcaataga gaccacacaa taaatatatg tcaaataaaa aaaaa 175
```

<210> 192

<211> 526

<212> DNA

<213> Homo sapiens

<400> 192

```
agtaaacatt attatTTTTT ttatatTTTgc aaaggaaaca tatctaattcc ttcctataga 60
aagaacagta ttgctgtaat tctTTTTctt ttcttctca ttctctctgc ccttaaaaag 120
attgaagaaa gagaaacttg tcaactcata tccacgttat ctagcaaagt acataagaat 180
ctatcactaa gtaatgtatc cttcagaatg tgttggttta ccagtgcac cccatattca 240
tcacaaaatt aaagcaagaa gtccatagta atttatTTTgc taatagtga tttttaatgc 300
tcagagtttc tgaggTcaaa ttttatcttt tcaattacaa gctctatgat cttaaataat 360
ttacttaatg tattttggtg tattttctct aaattaatat tgggtgtTcaa gactatatct 420
aatctctctg atcactTTTga gaaacaaact tttattaaat gtaaggcact tttctatgaa 480
ttttaaatat aaaaataaat attgttctga ttattactga aaaaaa 526
```

<210> 193

<211> 553

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 290, 300, 411, 441

<223> n = A,T,C or G

<400> 193

```
tccattgtgg tggaattcgc tctctggtaa aggcgtgcag gtgttggccg cggcctctga 60
gctgggatga gccgtgctcc cgggtggaagc aaggagccc agccggagcc atggccagta 120
cagtggtagc agttggactg accattgctg ctgcaggatt tgcaggccgt tacgttttgc 180
aagccatgaa gcatatggag cctcaagtaa aacaagtttt tcaaagccta ccaaaatctg 240
```

```

ccttcagtgg tggctattat agaggtgggt ttgaacccaa aatgacaaan cgggaagcan 300
cattaatact aggtgtaagc cctactgcca ataaagggaa aataagagat gctcatcgac 360
gaattatgct tttaaatcat cctgacaaag gaggatctcc ttatatagca nccaaaatca 420
atgaagctaa agatttacta naaggtcaag ctaaaaaatg aagtaaattgt atgatgaatt 480
ttaagttcgt attagtttat gtatatgagt actaagtttt tataataaaa tgcctcagag 540
ctacaatttt aaa 553

```

<210> 194

<211> 320

<212> DNA

<213> Homo sapiens

<400> 194

```

cccttcccaa tccatcagta aagaccccat ctgccttgct catgccgttt cccaacaggg 60
atgtcacttg atatgagaat ctcaaatctc aatgccttat aagcattcct tcctgtgtcc 120
attaagactc tgataattgt ctcccctcca taggaatttc tcccaggaaa gaaatatatc 180
cccatctccg tttcatatca gaactaccgt cccgatatt cccttcagag agattaaaga 240
ccagaaaaaa gtgagcctct tcatctgcac ctgtaatagt ttcagttcct attttcttcc 300
attgacccat atttatacct 320

```

<210> 195

<211> 320

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 203, 218

<223> n = A,T,C or G

<400> 195

```

aagcatgacc tggggaaatg gtcagacctt gtatttgttt tttggccttg aaagtagcaa 60
gtgaccagaa tctgccatgg caacaggctt taaaaaagac ccttaaaaag acactgtctc 120
aactgtggtg ttagcaccag ccagctctct gtacatttgc tagctttagt ttttctaaga 180
ctgagtaaac ttcttatttt tanaaagggg aggctggntt gtaactttcc ttgtacttaa 240
ttgggtaaaa gtcttttcca caaaccacca tctattttgt gaactttgtt agtcatcttt 300
tatttggtaa attatgaact 320

```

<210> 196

<211> 357

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 36

<223> n = A,T,C or G

<400> 196

```

atataaaata atacgaaact ttaaaaagca ttggantgtc agtatgttga atcagtagtt 60
tcactttaac tgtaaacaat ttcttaggac accatttggg ctagtttctg tgtaagtgtg 120
aatactacaa aaacttattt atactgttct tatgtcatTT gttatatcca tagatttata 180
tgatgatatg acatctggct aaaaagaaat tattgcaaaa ctaaccacta tgtacttttt 240
tataaatact gtatggacaa aaaatggcat tttttatatt aaattgttta gctctggcaa 300

```

aaaaaaaaa ttttaagagc tgggtactaat aaaggattat tatgactgtt aaaaaaa 357

<210> 197  
 <211> 565  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 27  
 <223> n = A,T,C or G

<400> 197  
 tcagctgagt accatcagga tatttanccc ttttaagtgt gttttgggag tagaaaaacta 60  
 aagcaacaat acttcctctt gacagctttg attggaatgg ggttattaga tcattcacct 120  
 tggctcctaca ctttttagga tgcttgggtga acataacacc acttataatg aacatccctg 180  
 gttcctatat tttgggctat gtgggtagga attgttactt gttactgcag cagcagccct 240  
 agaaagtaag cccagggctt cagatctaag ttagtccaaa agctaaatga tttaaagtca 300  
 agttgtaatg ctaggcataa gcactctata atacattaaa ttataggccg agcaattagg 360  
 gaatgtttct gaaacattaa acttgtatct atgtcactaa aattctaaca caaacttaaa 420  
 aaatgtgtct catacatatg ctgtactagg cttcatcatg cttttctaaa tttgtgtatg 480  
 atttgaatat atgaaagaat ttatacaaga gtgttattta aaattattaa aaataaatgt 540  
 atataatttg tacctattgt aaaaa 565

<210> 198  
 <211> 484  
 <212> DNA  
 <213> Homo sapiens

<400> 198  
 tatgtaagta ttggtgtctg ctttaaaaaa ggagaccag acttcacctg tccttttttaa 60  
 acatttgaga acagtgttac tctgagcagt tgggccacct tcaccttatc cgacagctga 120  
 ctggttggatg tgtccattgt cgccagtttg gctgttgccc ggacaggaca ggacctccat 180  
 tgggcgcagc agcaggtggc aggggtgtgg cttgaggtgg gtggcagcgt ctggctcctcc 240  
 tctctggtgc tttctgagag ggtctctaaa gcagagtgtg gttggcctgg gggaaggcag 300  
 agcacgtatt tctccctctt agtacctctg catttgtgag tgttccctct ggctttctga 360  
 agggcagcag actcttgagt atactgcaga ggacatgctt tatcagtagg tcctgagggc 420  
 tccaggggct caactgacca agtaacacag aagttggggg atgtggccta tttgggtcgg 480  
 aaac 484

<210> 199  
 <211> 429  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 77, 88, 134, 151, 189, 227, 274, 319  
 <223> n = A,T,C or G

<400> 199  
 gcttatgttt tttgttttaa cttttgtttt ttaacattta gaatattaca ttttgtatta 60  
 tacagtacct ttctcanaca ttttgtanaa ttcatttcgg cagctcacta ggattttgct 120  
 gaacattaaa aagngtgata gcgatattag ngccaatcaa atggaaaaaa ggtagtctta 180

```

ataaacaana cacaacgttt ttatacaaca tacttttaaaa tattaanaaaa actccttaat 240
attgtttcct attaatgatt attctttggg caanattttc tgatgctttt gattttctct 300
caatttagca tttgctttng gtttttttct ctatttagca ttctgttaag gcacaaaaac 360
tatgtactgt atgggaaatg ttgtaaatat taccttttcc acatttttaa cagacaactt 420
tgaatccaa 429

```

<210> 200

<211> 279

<212> DNA

<213> Homo sapiens

<400> 200

```

gcttttttga ggaattacag ggaagctcct ggaattgtac atggatatct ttatccctag 60
ggggaaatca aggagctggg caccctaata tctttatgga agtgttttaa actattttaa 120
ttttattaca agtattacta gagtagtggt tctactctaa gatttcacaaa gtgcatttaa 180
aatcatacat gttcccgccct gcaaataat tgttattttg gtggagaaaa aaatagtata 240
ttctacataa aaaattaaag atattaacta agaaaaaaa 279

```

<210> 201

<211> 569

<212> DNA

<213> Homo sapiens

<400> 201

```

taggtcagta tttttagaaa ctcttaatag ctcatactct tgataccaaa agcagccctg 60
attgttaaag cacacacctg cacaagaagc agtgatgggt gcatttacat ttcctgggtg 120
cacaaaaaaa aattctcaaa aagcaaggac ttacgctttt tgcaaagcct ttgagaagtt 180
actggatcat aggaagctta taacaagaat ggaagattct taaataactc actttctttg 240
gtatccagta acagtagatg ttcaaaatat gtagctgatt aataccagca ttgtgaacgc 300
tgtacaacct tgtggttatt actaagcaag ttactactag cttctgaaaa gtagcttcat 360
aattaatggt atttatacac tgccttccat gacttttact ttgccctaag ctaatctcca 420
aaatctgaaa tgctactcca atatcagaaa aaaaggggga ggtggaatta tatttcctgt 480
gattttaaga gtacagagaa tcatgcacat ctctgattag ttcatatatg tctagtgtgt 540
aataaaagtc aaagatgaac tctcaaaaa 569

```

<210> 202

<211> 501

<212> DNA

<213> Homo sapiens

<400> 202

```

attaataggc ttaataattg ttggcaagga tccttttgct ttctttggca tgcaagctcc 60
tagcatctgg cagtggggcc aagaaaataa ggtttatgca tgtatgatgg ttttcttctt 120
gagcaacatg attgagaacc agtgatatgc aacagggtgca tttgagataa ctttaaataa 180
tgtacctgtg tggcttaagc tggaaatctg tcaccttcca tccatgcaac aacttgttca 240
aattcttgac aatgaaatga agctcaatgt gcatatggat tcaatccac accatcgatc 300
atagcaccac ctatcagcac tgaaaactct tttgcattaa gggatcattg caagagcagc 360
gtgactgaca ttatgaaggc ctgtactgaa gacagcaagc tgtagtaca gaccagatgc 420
tttcttgga ggctcgttgt acctcttgga aaacctcaat gcaagatagt gtttcagtgc 480
tggcatattt tggaaattctg c 501

```

<210> 203

<211> 261

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 36, 96

<223> n = A,T,C or G

<400> 203

```
gacaagctcc tggctcttgag atgtcttctc gttaangaga tgggcctttt ggaggtaaag 60
gataaaatga atgagttctg tcatgattca ctattntata acttgcatga cctttactgt 120
gttagctctt tgaatgttct tgaaatttta gactttcttt gtaaacaaat gatatgtcct 180
tatcattgta taaaagctgt tatgtgcaac agtgtggaga ttccttgtct gatttaataa 240
aataacttaaa cactgaaaaa a                                     261
```

<210> 204

<211> 421

<212> DNA

<213> Homo sapiens

<400> 204

```
agcatctttt ctacaacgtt aaaattgcag aagtagctta tcattaaaaa acaacaacaa 60
caacaataac aataaatcct aagtgtaaat cagttattct acccctacc aaggatatca 120
gcctgttttt tccctttttt ctccctgggaa taattgtggg cttcttccca aatttctaca 180
gcctctttcc tcttctcatg cttgagcttc cctgtttgca cgcattgcgtg tgcaggactg 240
gcttggtgtg ttggactcgg ctccagggtg aagcatgctt tcccttggtta ctggttgaga 300
aactcaaac ttcaagccct aggtgtagcc attttgtcaa gtcacaaact gtatttttgt 360
actggcatta acaaaaaaag aagataaaat attgtacat taaactttaa taaaacttta 420
a                                     421
```

<210> 205

<211> 460

<212> DNA

<213> Homo sapiens

<400> 205

```
tactctcaca atgaaggacc tggaatgaaa aatctgtgtc taaacaagtc ctcttttagat 60
tttagtgcaa atccagagcc agcgtcgggt gcctcgagta attctttcat gggtagcttt 120
ggaaaagctc tcaggagacc tcacctagat gcctattcaa gctttggaca gccatcagat 180
tgtcagccaa gagcctttta tttgaaagct cattcttccc cagacttggg ctctgggtca 240
gaggaagatg ggaaagaaa gacagatttt caggaagaaa atcacatttg tacctttaaa 300
cagactttag aaaactacag gactccaaat tttcagctt atgacttggg cacatagact 360
gaatgagacc aaaggaaaag cttaacatac tacctcaagg tgaactttta tttaaaagag 420
agagaatctt atgtttttta aatggagtta tgaattttta                                     460
```

<210> 206

<211> 481

<212> DNA

<213> Homo sapiens

<400> 206

```
tgtggtggaa ttcgggacgc ccccagaccc tgactttttc ctgcgtgggc cgtctcctcc 60
tgcggaagca gtgacctctg acccctgggt accttcgctt tgagtgcctt ttgaacgctg 120
gtcccgcggg acttggtttt ctcaagctct gtctgtccaa agacgctccg gtcgagggtc 180
cgctgcctt ggggtggatac ttgaacccca gacgcccctc tgtgctgctg tgtccggagg 240
```

```

cggccttccc atctgcctgc ccacccggag ctctttccgc cggcgcaggg tcccaagccc 300
acctcccgcc ctcaagtctg cgggtgtgct ctgggcacgt cctgcacaca caatgcaagt 360
cctggcctcc gcgcccgcgc gccacgcga gccgtacccg ccgccaactc tgttatttat 420
ggtgtgaccc cctggaggtg ccctcgcccc accggggcta tttattgttt aatttatttg 480
t                                                    481

```

```

<210> 207
<211> 605
<212> DNA
<213> Homo sapiens

```

```

<400> 207
accctttttg gattcagggc tcctcacaat taaaatgagt gtaatgaaac aaggtgaaaa 60
tatagaagca tccctttgta tactgttttg ctacttacag tgtacttggc attgctttat 120
ctcactggat tctcacggta ggatttctga gatcttaatc taagctccaa agttgtctac 180
ttttttgatc ctaggggtgct ccttttgttt tacagagcag ggtcacttga tttgctagct 240
ggtggcagaa ttggcaccat taccaggtc tgactgacca ccagtcagag gcactttatt 300
tgtatcatga aatgatttga aatcatttga aagcagcgaa gtctgataat gaatgccagc 360
tttccttgtg ctttgataac aaagactcca aatattctgg agaacctgga taaaagtttg 420
aagggctaga ttgggatttg aagacaaaat ttagggaaat cttacatttt tgcaataaca 480
aacattaatg aaagcaaaac attataaaaag taattttaat tcaccacata cttatcaatt 540
tcttgatgct tccaaatgac atctaccaga tatggttttg tggacatctt tttctgttta 600
cataa                                                    605

```

```

<210> 208
<211> 655
<212> DNA
<213> Homo sapiens

```

```

<400> 208
ggcgttggtc tggattcccg tcgtaactta aagggaaact ttcacaatgt ccggagccct 60
tgatgtcctg caaatgaagg aggaggatgt ccttaagttc cttgcagcag gaaccacttt 120
agggtgcacc aatcttgact tccagatgga acagtacatc tataaaagga aaagtgatgg 180
catctatata ataaatctca agaggacctg ggagaagctt ctgctggcag ctcgtagcaat 240
tgttgccatt gaaaaccctg ctgatgtcag tgttatatcc tccaggaata ctggccagag 300
ggctgtgctg aagtttgcct ctgccactgg agccactcca attgctggcc gcttcaactcc 360
tggaaccttc actaaccaga tccaggcagc cttccgggag ccacggcttc ttgtggttac 420
tgacccagag gctgaccacc agcctctcac ggaggcatct tatgttaacc tacctaccat 480
tgcgctgtgt aacacagatt ctctctgcg ctatgtggac attgccatcc catgcaacaa 540
caagggagct cactcagtgg gtttgatgtg gtggatgctg gctcggaag ttctgcgcac 600
gcgtggcacc atttcccgtg aacacccatg ggaggatcat cctgatctgt acttc 655

```

```

<210> 209
<211> 621
<212> DNA
<213> Homo sapiens

```

```

<400> 209
catttagaac atggttatca tccaagacta ctctaccctg caacattgaa ctcccaagag 60
caaatccaca ttctcttga gttctgcagc ttctgtgtaa atagggcagc tgtcgtctat 120
gccgtagaat cacatgatct gaggaccatt catggaagct gctaaatagc ctagtctggg 180
gagtcttcca taaagttttg catggagcaa acaaacagga ttaaaactagg tttggttcct 240
tcagccctct aaaagcatag ggcttagcct gcaggcttcc ttgggctttc tctgtgtgtg 300
tagttttgta aacactatag catctgttaa gatccagtgt ccatggaaac cttcccacat 360

```

```

gccgtgactc tggactatat cagtttttgg aaagcagggg tcctctgcct gctaacaagc 420
ccacgtggac cagtctgaat gtcttttctt tacacctatg tttttaaaata gtcaaacttc 480
aagaaacaat ctaaacaagt ttctgttgca tatgtgtttg tgaacttgta tttgtattta 540
gtaggcttct atattgcatt taacttgttt ttgtaactcc tgattcttcc ttttcggata 600
ctattgatga ataaagaaat t                                     621

```

```

<210> 210
<211> 533
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 20, 21, 61
<223> n = A,T,C or G

```

```

<400> 210
cgccttgggg agccggcggn ngagtcggg acgtggagac ccgggggtccc ggcagccggg 60
nggcccgcgg gccaggggtg gggatgcacc gccgcggggt gggagctggc gccatcgcca 120
agaagaaact tgcagaggcc aagtataagg agcgaggggac ggtcttggtt gaggaccagc 180
tagcccagat gtcaaagcag ttggacatgt tcaagaccaa cctggaggaa tttgccagca 240
aacacaagca ggagatccgg aagaatcctg agttccgtgt gcagttccag gacatgtgtg 300
caaccattgg cgtggatccg ctggcctctg gaaaaggatt ttggtctgag atgctggggc 360
tgggggactt ctattacgaa ctagggtgtcc aaattatcga agtgtgcctg gcgctgaagc 420
atcggaatgg aggtctgata actttggagg aactacatca acaggtgttg aagggaaggg 480
gcaagttcgc ccaggatgtc agtcaagatg acctgatcag agccatcaag aaa          533

```

```

<210> 211
<211> 451
<212> DNA
<213> Homo sapiens

```

```

<400> 211
ttagcttgag ccgagaacga ggcgagaaag ctggagaccg aggagaccgc ctagagcgga 60
gtgaacgggg aggggaccgt ggggaccggc ttgatcgtgc gcggacacct gctaccaagc 120
ggagcttcag caaggaagtg gaggagcgga gtagagaacg gccctcccag cctgaggggc 180
tgcgcaaggc agctagcctc acggaggatc gggaccgtgg gcgggatgcc gtgaagcgag 240
aagctgcctt acccccagtg agccccctga aggcggctct ctctgaggag gagttagaga 300
agaaatccaa ggctatcatt gaggaatatc tccatctcaa tgacatgaaa gaggcagtc 360
agtgcgtgca ggagctggcc tcaccctcct tgctcttcat ctttgtacgg catggtgtcg 420
agtctacgct ggagcgcagt gccattgctc g                                     451

```

```

<210> 212
<211> 471
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 54
<223> n = A,T,C or G

```

```

<400> 212
gtgattattc ttgatcaggg agaagatcat ttagatttgt tttgcattcc ttanaatgga 60

```

```

gggcaacatt ccacagctgc cctggctgtg atgagtgtcc ttgcaggggc cggagtagga 120
gcactggggt gggggcgga ttgggggttac tcatgttaag ggattccttg ttgttggtt 180
gagatccagt gcagttgtga tttctgtgga tcccagcttg gttccaggaa ttttgtgtga 240
ttggcttaaa tccagttttc aatcttcgac agctgggctg gaacgtgaac tcagtagctg 300
aacctgtctg acccggtcac gttcttggat cctcagaact ctttgctctt gtcggggtg 360
gggtgggaac tcacgtgggg agcgggtggct gagaaaatgt aaggattctg gaatacatat 420
tccatgggac tttccttccc tctcctgctt cctcttttcc tgctccctaa c 471

```

```

<210> 213
<211> 511
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 27, 63, 337, 442
<223> n = A,T,C or G

```

```

<400> 213
ctaattagaa acttgctgta cttttnttt tcttttaggg gtcaaggacc ctctttatag 60
ctnccatttg cctacaataa attattgcag cagtttgcaa tactaaaata ttttttatag 120
actttatatt tttccttttg ataaagggat gctgcatagt agagttgggt taattaaact 180
atctcagccg tttccctgct ttccttctg ctccatatgc ctcatgtcc ttccaggag 240
ctcttttaat cttaaagttc tacatttcat gctcttagtc aaattctgtt acctttttaa 300
taactcttcc cactgcatat ttccatcttg aattggnggt tctaaattct gaaactgtag 360
ttgagataca gctattttaa atttctggga gatgtgcatc cctcttcttt gtggttgccc 420
aaggttgttt tgcgtaactg anactccttg atatgcttca gagaatttag gcaaactg 480
gccatggccg tgggagtact gggagtaaaa t 511

```

```

<210> 214
<211> 521
<212> DNA
<213> Homo sapiens

```

```

<400> 214
agcattgcc aataatccct aattttccac taaaaatata atgaaatgat gttaagcttt 60
ttgaaaagtt taggttaaac ctactgttgt tagattaatg tatttggtgc ttccctttat 120
ctggaatgtg gcattagctt ttttatttta accctcttta attcttattc aattccatga 180
cttaagggtg gagagctaaa cactgggatt tttggataac agactgacag ttttgcataa 240
ttataatcgg cattgtacat agaaaggata tggctacctt ttgttaaata tgcactttct 300
aaatatcaaa aaagggaat gaagtataaa tcaatttttg tataatctgt ttgaaacatg 360
agttttatth gcttaatat agggctttgc cccttttctg taagtctctt gggatcctgt 420
gtagaagctg ttctcattaa acaccaaaca gttaagtcca ttctctggta ctagtacaa 480
attcggtttc atattctact taacaattta aataaactga a 521

```

```

<210> 215
<211> 381
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 17, 20, 60, 61, 365
<223> n = A,T,C or G

```

<400> 215  
gagcggagag cggaccngtn agagccctga gcagccccac cgccgcccgc ggcctagttn 60  
ncatcacacc ccgggaggag ccgcagctgc cgcagccggc ccagtcacc atcacgcaa 120  
ccatgagcag cgaggccgag acccagcagc cgcccgcgc ccccccgcc gcccccgccc 180  
tcagcgccgc cgacaccaag ccggcacta cgggcagcgg cgcagggagc ggtggcccg 240  
gcggcctcac atcggcgggc cctgccggcg gggacaagaa ggtcatcgca acgaaggttt 300  
tgggaacagt aaaatggttc aatgtaagga acggatatgg tttcatcaac aggaatgaca 360  
ccaangaaga tgtatttgta c 381

<210> 216  
<211> 425  
<212> DNA  
<213> Homo sapiens

<400> 216  
ttactaacta ggtcattcaa ggaagtcaag ttaacttaaa catgtcacct aaatgcactt 60  
gatggtgttg aaatgtccac cttcttaaat ttttaagatg aacttagttc taaagaagat 120  
aacaggccaa tcctgaaggc actccctgtt tgctgcagaa tgtcagatat tttggatgtt 180  
gcataagagt cctatttgcc ccagttaatt caacttttgt ctgcctgttt tgtggactgg 240  
ctggctctgt tagaactctg tccaaaaagt gcatggaata taacttgtaa agcttccac 300  
aattgacaat atatatgcat gtgttttaaac caaatccaga aagcttaaac aatagagctg 360  
cataatagta tttattaaag aatcacaact gtaaacatga gaataactta aggattctag 420  
tttag 425

<210> 217  
<211> 181  
<212> DNA  
<213> Homo sapiens

<400> 217  
gagaaaccaa atgataggtt gtagagcctg atgactccaa acaaagccat caccgcatt 60  
cttcctcctt cttctggtgc tacagctcca agggcccttc accttcattg ctgaaatgga 120  
actttggctt tttcagtgga agaatatgtt gaaggtttca ttttgttcta gaaaaaaaaa 180  
a 181

<210> 218  
<211> 405  
<212> DNA  
<213> Homo sapiens

<400> 218  
caggccttcc agttcactga caaacatggg gaagtgtgcc cagctggctg gaaacctggc 60  
agtgatacca tcaagcctga tgtccaaaag agcaaagaat atttctccaa gcagaagtga 120  
gcgctgggct gtttttagtg caggctgagg tgggcagcca tgagaacaaa acctcttctg 180  
tatttttttt ttccattagt aaaacacaag acttcagatt cagccgaatt gtggtgtcct 240  
acaaggcagg cctttcctac agggggtgga gagaccagcc tttcttcctt tggtaggaat 300  
ggcctgagtt ggcgttgtgg gcaggctact ggtttgtatg atgtattagt agagcaaccc 360  
attaatcctt tgtagtttgt attaaacttg aactgagaaa aaaaa 405

<210> 219  
<211> 216  
<212> DNA  
<213> Homo sapiens

<220>

<221> misc\_feature

<222> 207, 210

<223> n = A,T,C or G

<400> 219

```
actccaagag ttagggcagc agagtggagc gatttagaaa gaacatttta aaacaatcag 60
ttaatttacc atgtaaaatt gctgtaaatg ataatgtgta cagattttct gttcaaatat 120
tcaattgtaa acttcttggt aagactgtta cgtttctatt gcttttgtat gggatattgc 180
aaaaataaaa aggaaagaac cctcttnaan aaaaaa 216
```

<210> 220

<211> 380

<212> DNA

<213> Homo sapiens

<400> 220

```
cttacaaatt gccccatgt gtaggggaca cagaaccctt tgagaaaact tagatttttg 60
tctgtaca aa gtctttgcct ttttccttct tcattttttt ccagtacatt aaatttgtca 120
atttcatctt tgagggaac tgattagatg ggttggtgtt gtgttctgat ggagaaaaca 180
gcacccaag gactcagaag atgattttta cagttcagaa cagatgtgtg caatattggt 240
gcatgtaata atgttgagtg gcagtcaaaa gtcagtattt ttatcttagt tcttcattac 300
tgcattgaaa aggaaaacct gtctgagaaa atgcctgaca gtttaattta aaactatggt 360
gtaagtcttt gacaaaaaaa 380
```

<210> 221

<211> 398

<212> DNA

<213> Homo sapiens

<400> 221

```
ggttagtaag ctgtcgactt tgtaaaaaag ttaaaaatga aaaaaaaagg aaaaatgaat 60
tgtatattta atgaatgaac atgtacaatt tgccactggg aggaggttcc tttttgttg 120
gtgagtctgc aagtgaattt cactgatgtt gatattcatt gtgtgtagtt ttatttcggt 180
cccagccccg tttcctttta ttttgagct aatgccagct gcgtgtctag ttttgagtgc 240
agtaaaatag aatcagcaaa tcaactcttat ttttcactct tttccggtat tttttgggtt 300
gtttctgttg gagcagtgt caccaactct tctgtatat tgcccttttg ctggaaaatg 360
ttgtatgttg aataaaattt tctataaaaa ttaaaaaa 398
```

<210> 222

<211> 301

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 49, 64

<223> n = A,T,C or G

<400> 222

```
ttcgataatt gatctcatgg gctttccctg gaggaaaggt tttttttgnt gtttattttt 60
taanaacttg aaacttgtaa actgagatgt ctgtagcttt tttgcccac tgtagtgtat 120
gtgaagattt caaaacctga gagcactttt tctttgttta gaattatgag aaaggcacta 180
```

```

gatgacttta ggatttgcac ttttcccttt attgcctcat ttcttgtgac gccttgttgg 240
ggaggggaaat ctgtttatatt tttcctacaa ataaaaagct aagattctat atcgcaaaaa 300
a 301

```

```

<210> 223
<211> 200
<212> DNA
<213> Homo sapiens

```

```

<400> 223
gtaagtgcctt aggaagaaac tttgcaaaca tttaatgagg atacactggt catttttaaa 60
attccttcac actgtaattt aatgtgtttt atattctttt gtagtaaaac aacataactc 120
agatttctac aggagacagt ggttttattt ggattgtcct ctgtaatagg tttcaataaa 180
gctggatgaa cttaaaaaaaa 200

```

```

<210> 224
<211> 385
<212> DNA
<213> Homo sapiens

```

```

<400> 224
gaaagggtttg atccggactc aaagaaagca aaggagtgtg agccgccatc tgctggagca 60
gctgtaactg caagacctgg acaagagatt cgtcagcgaa ctgcagctca aagaaacctt 120
tctccaacac cagcaagccc taaccagggc cctcctccac aagttccagt atctcctgga 180
ccaccaaaagg acagtctctgc ccctgggtgga cccccagaaa ggactgttac tccagcccta 240
tcatcaaattg tgttaccaag acatcttgga tccccgcta cttcagtgcc tggaatgggt 300
aaacagagca cttaattgta ttacagttt atattgtttt ctctggttac caataaaacg 360
ggccattttc aggtggtata aaaaa 385

```

```

<210> 225
<211> 560
<212> PRT
<213> Homo sapiens

```

```

<400> 225
Met Glu Cys Leu Tyr Tyr Phe Leu Gly Phe Leu Leu Leu Ala Ala Arg
 1          5          10          15
Leu Pro Leu Asp Ala Ala Lys Arg Phe His Asp Val Leu Gly Asn Glu
 20          25          30
Arg Pro Ser Ala Tyr Met Arg Glu His Asn Gln Leu Asn Gly Trp Ser
 35          40          45
Ser Asp Glu Asn Asp Trp Asn Glu Lys Leu Tyr Pro Val Trp Lys Arg
 50          55          60
Gly Asp Met Arg Trp Lys Asn Ser Trp Lys Gly Gly Arg Val Gln Ala
 65          70          75          80
Val Leu Thr Ser Asp Ser Pro Ala Leu Val Gly Ser Asn Ile Thr Phe
 85          90          95
Ala Val Asn Leu Ile Phe Pro Arg Cys Gln Lys Glu Asp Ala Asn Gly
100          105          110
Asn Ile Val Tyr Glu Lys Asn Cys Arg Asn Glu Ala Gly Leu Ser Ala
115          120          125
Asp Pro Tyr Val Tyr Asn Trp Thr Ala Trp Ser Glu Asp Ser Asp Gly
130          135          140
Glu Asn Gly Thr Gly Gln Ser His His Asn Val Phe Pro Asp Gly Lys

```

145					150					155				160
Pro	Phe	Pro	His	His	Pro	Gly	Trp	Arg	Arg	Trp	Asn	Phe	Ile	Tyr
				165					170					175
Phe	His	Thr	Leu	Gly	Gln	Tyr	Phe	Gln	Lys	Leu	Gly	Arg	Cys	Ser
			180					185					190	
Arg	Val	Ser	Val	Asn	Thr	Ala	Asn	Val	Thr	Leu	Gly	Pro	Gln	Leu
		195					200					205		
Glu	Val	Thr	Val	Tyr	Arg	Arg	His	Gly	Arg	Ala	Tyr	Val	Pro	Ile
	210					215					220			
Gln	Val	Lys	Asp	Val	Tyr	Val	Val	Thr	Asp	Gln	Ile	Pro	Val	Phe
225					230					235				240
Thr	Met	Phe	Gln	Lys	Asn	Asp	Arg	Asn	Ser	Ser	Asp	Glu	Thr	Phe
			245						250					255
Lys	Asp	Leu	Pro	Ile	Met	Phe	Asp	Val	Leu	Ile	His	Asp	Pro	Ser
		260						265					270	
Phe	Leu	Asn	Tyr	Ser	Thr	Ile	Asn	Tyr	Lys	Trp	Ser	Phe	Gly	Asp
		275					280					285		
Thr	Gly	Leu	Phe	Val	Ser	Thr	Asn	His	Thr	Val	Asn	His	Thr	Tyr
	290					295					300			
Leu	Asn	Gly	Thr	Phe	Ser	Leu	Asn	Leu	Thr	Val	Lys	Ala	Ala	Ala
305					310					315				320
Gly	Pro	Cys	Pro	Pro	Pro	Pro	Pro	Pro	Pro	Arg	Pro	Ser	Lys	Pro
			325						330					335
Pro	Ser	Leu	Gly	Pro	Ala	Gly	Asp	Asn	Pro	Leu	Glu	Leu	Ser	Arg
		340					345						350	
Pro	Asp	Glu	Asn	Cys	Gln	Ile	Asn	Arg	Tyr	Gly	His	Phe	Gln	Ala
	355						360					365		
Ile	Thr	Ile	Val	Glu	Gly	Ile	Leu	Glu	Val	Asn	Ile	Ile	Gln	Met
	370					375					380			
Asp	Val	Leu	Met	Pro	Val	Pro	Trp	Pro	Glu	Ser	Ser	Leu	Ile	Asp
385					390					395				400
Val	Val	Thr	Cys	Gln	Gly	Ser	Ile	Pro	Thr	Glu	Val	Cys	Thr	Ile
			405						410					415
Ser	Asp	Pro	Thr	Cys	Glu	Ile	Thr	Gln	Asn	Thr	Val	Cys	Ser	Pro
		420						425				430		
Asp	Val	Asp	Glu	Met	Cys	Leu	Leu	Thr	Val	Arg	Arg	Thr	Phe	Asn
		435					440					445		
Ser	Gly	Thr	Tyr	Cys	Val	Asn	Leu	Thr	Leu	Gly	Asp	Asp	Thr	Ser
	450					455				460				
Ala	Leu	Thr	Ser	Thr	Leu	Ile	Ser	Val	Pro	Asp	Arg	Asp	Pro	Ala
465					470					475				480
Pro	Leu	Arg	Met	Ala	Asn	Ser	Ala	Leu	Ile	Ser	Val	Gly	Cys	Leu
			485						490					495
Ile	Phe	Val	Thr	Val	Ile	Ser	Leu	Leu	Val	Tyr	Lys	Lys	His	Lys
		500						505					510	
Tyr	Asn	Pro	Ile	Glu	Asn	Ser	Pro	Gly	Asn	Val	Val	Arg	Ser	Lys
	515						520					525		
Leu	Ser	Val	Phe	Leu	Asn	Arg	Ala	Lys	Ala	Val	Phe	Phe	Pro	Gly
	530					535					540			
Gln	Glu	Lys	Asp	Pro	Leu	Leu	Lys	Asn	Gln	Glu	Phe	Lys	Gly	Val
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&lt;213&gt; Homo sapiens

&lt;400&gt; 232

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1 5 10 15

Phe Ser Phe Ala

20

&lt;210&gt; 233

&lt;211&gt; 21

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 233

Phe Phe Ser Phe Ala Ala Asn Gly Arg Tyr Ser Leu Lys Val His Val

1 5 10 15

Asn His Ser Pro Ser

20

&lt;210&gt; 234

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 234

Phe Leu Val Thr Trp Gln Ala Ser Gly Pro Pro Glu Ile Ile Leu Phe

1 5 10 15

Asp Pro Asp Gly

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&lt;210&gt; 235

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 235

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Pro Asn Ser Asp

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 Pro Glu Ala Phe Glu Lys Leu Gly Phe Pro Ala Ala Lys Glu Ile Ala  
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aggaatcatt	tgcttatta	tagttgtgac	acatcatact	ttaaagcagga	aaaagagagc	7800
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ggcggccgct	cgagcaccac	caccaccacc	actgagatcc	ggctgctaac	aaagcccga	7920
aggaagctga	gttggctgct	gccaccgctg	agcaataact	agcataaacc	cttggggcct	7980
ctaaacgggt	cttgaggggt	ttttgtctga	aaggaggaac	tatatccgga	t	8031

<211> 401  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 9, 67, 247, 275, 277, 397  
 <223> n = A,T,C or G

<400> 255  
 gtggccagng actagaaggc gaggcgcccgc gggaccatgg cggcggcggc ggacgagcgg 60  
 agtccanagg acggagaaga cgaggaagag gaggagcagt tggttctggt ggaattatca 120  
 ggaattattg attcagactt cctctcaaaa tgtgaaaata aatgcaagg tttgggcatt 180  
 gacactgaga ggcccattct gcaagtggac agctgtgtct ttgctgggga gtatgaagac 240  
 actctangga cctgtgttat atttgaagaa aatgntnaac atgctgatac agaaggcaat 300  
 aataaaacag tgctaaaata taaatgccat acaatgaaga agctcagcat gacaagaact 360  
 ctctgacag agaagaagga aggagaagaa aacatangtg g 401

<210> 256  
 <211> 401  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 7, 37, 51, 79, 96, 98, 103, 104, 107, 116, 167, 181, 183,  
 194, 206, 276, 303, 307, 308, 310, 323, 332, 341, 353, 374,  
 376  
 <223> n = A,T,C or G

<400> 256  
 tgggtggncc t gggatgggga accgcggttg cttccngnga ggtttcggca ntggcatccg 60  
 gggccggggg cgcgggccng gacggggccg gggccnangc cgnnganctc gcggangcaa 120  
 ggccgaggat aaggagtgga tgcccgtcac caacttgggc cgcttgncca aggacatgaa 180  
 nancagccc ctgnaggaga tctatntctt cttccctgcc ccattaagga atcaagagat 240  
 catttgattt cttcctgggg gcctctctca aggatnagg ttttgaagat tatgccagt 300  
 canaaannan accccgttgc ccngtccatc tncacccaac ncttccaagg gcnatttttg 360  
 tttaggcctc attncngggg ggaaccttaa cccaatttgg g 401

<210> 257  
 <211> 401  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 382, 387  
 <223> n = A,T,C or G

<400> 257  
 atgtatgtaa aacacttcat aaaatgtaaa gggctataac aaatatgtta taaagtgatt 60  
 ctctcagccc tgaggataac agaatcattt gcctcagact gctgttggat tttaaaattt 120  
 tttaaataatc tgctaagtaa tttgctatgt cttctccac actatcaata tgctgtcttc 180  
 taacaggctc cccactttct tttaatgtgc tgttatgagc tttggacatg agataaccgt 240

```

gcctgttcag agtgtctaca gtaagagctg gacaaactct ggagggacac agtctttgag 300
acagctcttt tggttgcttt ccacttttct gaaaggttca cagtaacctt ctagataata 360
gaaactccca gttaaagcct angctancaa ttttttttag t 401

```

```

<210> 258
<211> 401
<212> DNA
<213> Homo sapiens

```

```

<400> 258
ggagcgctag gtcggtgtac gaccgagatt aggggtgctg ccagctccgg gaggccgcgg 60
tgaggggccc ggcccaagct gccgaccga gccgatcgtc agggtcgcca gcgcctcagc 120
tctgtggagg agcagcagta gtcggagggt gcaggatatt agaaatggct actccccagt 180
caattttcat ctttgcaatc tgcattttta tgataacaga attaatcttg gcctcaaaaa 240
gctactatga tatcttaggt gtgccaaaat cggcatcaga gcgccaaatc aagaaggcct 300
ttcacaagtt ggccatgaag taccaccctg acaaaaataa gaccagatg ctgaagcaaa 360
attcagagag attgcagaag catatgaaac actctcagat g 401

```

```

<210> 259
<211> 401
<212> DNA
<213> Homo sapiens

```

```

<400> 259
attgggtttt gaggaggat gatgacagag gaatgccctt tggccatcac ggttttgatt 60
ctccagaata ttgtgggttt gatcatcaat gcagtcatgt taggctgcat ttcatgaaa 120
acagctcagg ctacagaag ggcagaaact ttgattttca gccgccatgc tgtgattgcc 180
gtccgaaatg gcaagctgtg cttcatgttc cgagtgggtg acctgaggaa aagcatgac 240
attagtgcct ctgtgcgcac ccagggtggtc aagaaaacaa ctacacctga aggggagggtg 300
gttcctattc accaactgga cattcctgtt gataacccaa tcgagagcaa taacattttt 360
ctggtggccc ctttgatcat ctgccacgtg attgacaagc g 401

```

```

<210> 260
<211> 363
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 7, 9, 19, 41, 63, 73, 106, 111, 113, 116, 119, 156, 158,
162, 187, 247, 288, 289, 290, 292, 298, 299, 300, 340
<223> n = A,T,C or G

```

```

<400> 260
aggaganang gagggggana tgaataggga tggagaggga natagtggat gagcagggca 60
canggagagg aancagaaag gagaggcaag acaggagac acacancaca nangangana 120
caggtggggg ctgggggtgg gcatggagag ctttnangt cncccaggcc accctgctct 180
cgctggnctg ttgaaaccca ctccatggct tctgccact gcagttgggc ccagggtctg 240
cttattnctg gaatgcaagt ggctgtggct tggagcctcc cctctggnnn anggaaannn 300
attgctccct tatctgcttg gaatatctga gtttttccan cccggaaata aaacacacac 360
aca 363

```

```

<210> 261
<211> 401

```

<212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 114, 152  
 <223> n = A,T,C or G

<400> 261  
 cggtctccg ccgtctctcc ggggtttcgg ggcacttggg tcccacagtc tggctctgct 60  
 tcaccttccc ctgacctgag tagtcgccat ggcacagggt ctcagaggca ctgngactga 120  
 cttccctgga tttgatgagc gggctgatgc anaaactctt cggaaggcta tgaaaggctt 180  
 gggcacagat gaggagagca tcctgactct gttgacatcc cgaagtaatg ctcagcgcca 240  
 ggaaatctct gcagctttta agactctggt tggcagggat cttctggatg acctgaaatc 300  
 agaactaact ggaaaatttg aaaaattaat tgtggctctg atgaaaccct ctcggcttta 360  
 tgatgcttat gaactgaaac atgccttgaa gggagctgga a 401

<210> 262  
 <211> 401  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 7, 26, 258, 305, 358, 373, 374, 378  
 <223> n = A,T,C or G

<400> 262  
 agtctanaac atttctaata ttttgnctt tcatatatca aaggagatta tgtgaaacta 60  
 tttttaaata ctgtaaagtg acatatagtt ataagatata tttctgtaca gtagagaaag 120  
 agtttataac atgaagaata ttgtaccatt atacattttc attctcgatc tcataagaaa 180  
 ttcaaaagaa taatgataga ggtgaaaata tgtttacttt ctctaaatca agcctagtgt 240  
 tcaactcaaa aattatgntg catagtttta ttttgaattt aggttttggg actacttttt 300  
 tccancttca atgagaaaaat aaaatctaca actcaggagt tactacagaa gttctaanta 360  
 tttttttgct aannagcnaa aaatataaac atatgaaaat g 401

<210> 263  
 <211> 401  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 232, 290, 304, 326, 383  
 <223> n = A,T,C or G

<400> 263  
 ctgtccgacc aagagaggcc ggccgagccc gaggcttggg cttttgcttt ctggcggagg 60  
 gatctgcggc ggttttaggag gcggcgctga tcctgggagg aagaggcagc tacggcggcg 120  
 gcggcggtgg cggctagggc ggcggcgaat aaaggggccg ccgcccgggtg atgcggtgac 180  
 cactgcggga ggcccaggag ctgagtgggc cccggccctc agcccgtccc gncggaccgg 240  
 ctttctctcaa ctctccatct tctcttgccg accgagatcg ccgaggcggn ctcaggctcc 300  
 ctancccttt ccccgctcct tccccncccc cgtccccgcc ccggggggccg ccgccaccgg 360  
 cctcccacca tggctctgaa ganaatccac aaggaattga a 401

<210> 264  
 <211> 401  
 <212> DNA  
 <213> Homo sapiens

<400> 264  
 aacaccagcc actccaggac cctgaaggc ctctaccagg tcaccagtgt tctgcgccta 60  
 aagccacccc ctggcagaaa cttcagctgt gtgttctgga atactcacgt gagggaaactt 120  
 actttggcca gcattgacct tcaaagtcag atggaaccca ggacccatcc aacttggtg 180  
 cttcacattt tcatccctc ctgcatcatt gctttcattt tcatagccac agtgatagcc 240  
 ctaagaaaac aactctgtca aaagctgtat tcttcaaaag acacaacaaa aagacctgtc 300  
 accacaacaa agagggaagt gaacagtgt gtgaatctga acctgtggtc ttgggagcca 360  
 ggggtgacctg atatgacatc taaagaagct tctggactct g 401

<210> 265  
 <211> 271  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 59  
 <223> n = A,T,C or G

<400> 265  
 gccatttcct gtggacatgg gcagagcgct gctgccagtt cctggtagcc ttgaccacna 60  
 cgctgggggg tctttgtgat ggtcatgggt ctcatctgca cttgggggtg tgggattcaa 120  
 gttagaagtt tctagatctg gccgggcgca gtggctcaca cctgtaatcc cagcacttta 180  
 ggaggctgag gcaggcggat catgaggta ggagatcgag accgtcctgg ctaacacagt 240  
 gaaaccccgct ctctactaaa aatacaaaaa a 271

<210> 266  
 <211> 401  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 45  
 <223> n = A,T,C or G

<400> 266  
 attcataaat ttagctgaaa gatactgatt caatttgtat acagnngaata taaatgagac 60  
 gacagcaaaa ttttcatgaa atgtaaaata tttttatagt ttgttcatac tatatgaggt 120  
 tctattttta atgactttct ggatttttaa aaatttcttt aaatacaatc atttttgtta 180  
 tattttattt atgcttatga tctagataat tgcagaatat cattttatct gactctgtct 240  
 tcataagaga gctgtggccg aattttgaac atctgttata gggagtgatc aaattagaag 300  
 gcaatgtgga aaaacaattc tgggaaagat ttctttatat gaagtccttg ccactagcca 360  
 gccatcctaa ttgatgaaag ttatctgttc acaggcctgc a 401

<210> 267  
 <211> 401  
 <212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 116, 247, 277, 296, 307, 313, 322, 323, 336, 342, 355, 365, 377, 378, 397

<223> n = A,T,C or G

<400> 267

```
gaagaggcat cacctgatcc cggagacctt tggagttaag aggcggcgga agcgagggcc 60
tgtggagtcg gatcctcttc ggggtgagcc agggtcggcg cgcgcggtg tctcanaact 120
catgcagctg ttcccgcgag gcctgtttga ggacgcgctg ccgcccatcg tgctgaggag 180
ccaggtgtac agccttgtgc ctgacaggac cgtggccgac cggcagctga aggagcttca 240
agagcanggg gagacaaaat cgtccagctg ggcttcnact tggatgccca tggaanttat 300
tctttcnctt ganggactta cnngggaccc aagaanccct tncaaggggc ccttngtgga 360
tgggncccga aaccccnnta tttgcccttg ggggggncca a 401
```

<210> 268

<211> 223

<212> DNA

<213> Homo sapiens

<400> 268

```
tgcgcatggt ggccaggctg gtcttgaact cctgacttta agtgatccac ccgcctcaac 60
ctcccaaagt gctgggatta caggtgtgag ccaccgcgcc tggcctgata catactttta 120
gaatcaagta gtcacgcact ttttctgttc atttttctaa aaagtaaata taaaaatggt 180
ttgttttttg ttttttttgg ttgtttgttt ctgttttttt ttt 223
```

<210> 269

<211> 401

<212> DNA

<213> Homo sapiens

<400> 269

```
actatgtaaa ccacattgta ctttttttta ctttggaac aaatatttat acatacaaga 60
tgctagtcca ttggaatatt tctcccaact tatccaagga tctccagctc taacaaaatg 120
gtttattttt atttaaatgt caatagtgtt tttttaaaat ccaaatacaga ggtgcaggcc 180
accagttaaa tgccgtctat caggttttgt gccttaagag actacagagt caaagctcat 240
ttttaaaagga gtaggacaaa gttgtcacag gtttttggtg ttgtttttat tgcccccaaa 300
attacatggt aatttccatt tatatcaggg attctattta cttgaagact gtgaagttgc 360
cattttgtct cattgttttc tttgacataa ctaggatcca t 401
```

<210> 270

<211> 401

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 240, 382

<223> n = A,T,C or G

<400> 270

```
tggctgttga ttcacctcag cactgcttgg tatctgcacc ctacctctct ttagaggctg 60
```

```

ccttggtcaac tgaaaaatgc acctgacttc gagcaagact ctttccttag gttctggatc 120
tgtttgagcc ccatggcact gagctggaat ctgagggtct tgttccaagg atgtgatgat 180
gtgggagaat gttctttgaa agagcagaaa tccagtctgc atggaaacag cctgtagagn 240
agaagtttcc agtgataagt gttcactgtt ctaaggaggt acaccacagc tacctgaatt 300
ttcccaaaat gagtgcttct gtgcgttaca actggccttt gtacttgact gtgatgactt 360
tgttttttct tttcaattct anatgaacat gggaaaaaat g 401

```

```

<210> 271
<211> 329
<212> DNA
<213> Homo sapiens

```

```

<400> 271
ccacagcctc caagtcaggt ggggtggagt cccagagctg cacagggttt ggcccaagtt 60
tctaaggagag gcatttcctc cctcgcccca tcagtgccag cccctgctgg ctgggtgcctg 120
agccctcag acagccccct gccccgcagg cctgccttct cagggacttc tgcggggcct 180
gaggcaagcc atggagttag acccaggagc cggacacttc tcaggaaatg gcttttccca 240
acccccagcc cccacccggt ggttcttctc gttctgtgac tgtgtatagt gccaccacag 300
cttatggcat ctcataggag acaaaaaaa 329

```

```

<210> 272
<211> 401
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 1, 7, 12, 21, 61, 62, 66, 72, 78, 88, 90, 92, 98, 117, 119,
128, 130, 134, 142, 144, 151, 159, 162, 164, 168, 169, 177,
184, 185, 188, 194, 202, 204, 209, 213, 218, 223, 231, 260,
272, 299, 300, 306, 321, 322, 323, 331, 335, 336, 338
<223> n = A,T,C or G

```

```

<221> misc_feature
<222> 341, 342, 343, 345, 346, 351, 358, 360, 362, 363, 387, 390,
392
<223> n = A,T,C or G

```

```

<400> 272
nggctgntaa cntcggaggt nacttcctgg actatcctgg agacccccctc cgcttccacg 60
nncatnatat cntcatngc tgggcccntn angacacnat cccactccaa cacctgngng 120
atgctggncn cctnggaacc ancntcagaa ngaccctgnt cntntgtntt ccgcaanctg 180
aagnnaangc gggntacacc tnentgcant ggnccacnct gcnggggaact ntacacacct 240
acgggatgtg gctgcgcca gagccaagag cntttctgga tgattcccca gcctcttgnn 300
agggantcta caacattgct nnntacctt ntcnnncngc nntntntgga ntacaggngn 360
tnntaacact acatcttttt tactgcncch tncttggtgg g 401

```

```

<210> 273
<211> 401
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature

```

&lt;222&gt; 399

&lt;223&gt; n = A,T,C or G

&lt;400&gt; 273

```

cagcaccatg aagatcaaga tcatcgccacc cccagagcgc aagtactcgg tgtggatcgg 60
tggctccatc ctggcctcac tgtccacctt ccagcagatg tggattagca agcaggagta 120
cgacgagtcg ggccccctcca tcgtccaccg caaatgcttc taaacggact cagcagatgc 180
gtagcatttg ctgcatgggt taattgagaa tagaaatttg cccctggcaa atgcacacac 240
ctcatgctag cctcacgaaa ctggaataag ccttcgaaaa gaaattgtcc ttgaagcttg 300
tatctgatat cagcactgga ttgtagaact tgttgctgat tttgaccttg tattgaagtt 360
aactgttccc cttggtatta acgtgtcagg gctgagtgnt c 401

```

&lt;210&gt; 274

&lt;211&gt; 401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 274

```

ccaccacac ccaccgcgc ctcgttcgcc tcttctccgg gagccagtcc gcgccaccgc 60
cgccgcccag gccatcgcca ccctccgcag ccattgtccac cagggtccgtg tcctcgtcct 120
cctaccgcag gatgttcggc ggcccgggca ccgcgagccg gccgagctcc agccggagct 180
acgtgactac gtccaccgc acctacagcc tgggcagcgc gctgcgcccc agcaccagcc 240
gcagcctcta cgctcgtcc ccggggcgcg tgtatgccac gcgctcctct gccgtgcgcc 300
tgccggagcag cgtgcccggg gtgcggctcc tgcaggactc ggtggacttc tcgctggccg 360
acgccatcaa caccgagttc aagaacaccc gcaccaacga g 401

```

&lt;210&gt; 275

&lt;211&gt; 401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 275

```

ccacttccac cactttgtgg agcagtgcct tcagcgcaac ccggatgccca ggtatccctg 60
ctggcctggg cctgggcttc gggagagcag aggggtgctca ggagggttaag gccagggtgt 120
gaagggactt acctcccaa ggctctgcag gggaatctgg agctacacac aggagggtatc 180
agctcctggg tgtgtcagag gccagcctgg ggagctctgg ccaactgcttc ccatgagctg 240
agggagaggg agaggggacc cgaggctgag gcataagtgg caggatttcg ggaagctggg 300
gacacggcag tgatgctgcg gtctctcttc ccttttcct ccaggcccag tgccagcacc 360
ctcctgaacc actctttctt caagcagatc aagcgacgtg c 401

```

&lt;210&gt; 276

&lt;211&gt; 401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; 11

&lt;223&gt; n = A,T,C or G

&lt;400&gt; 276

```

tctgatattg ntacccttga gccacctaa ttagaagaaa ttggaaatca agaagttgtc 60
attgttgaag aagcacagag ttcagaagac tttaacatgg gctcttcctc tagcagccag 120
tatactttct gtcagccaga aactgtattt tcatctcagc ctagtgatga tgaatcaagt 180

```

```

agtgatgaaa ccagtaatca gccagtcct gcctttagac gacgccgtgc taggaagaag 240
accgtttctg cttcagaatc tgaagaccgg ctagttgggtg aacaagaaac tgaaccttct 300
aaggagttga gtaaactgca gttcagtagt ggtctcaata agtgtgttat acttgctttg 360
gtgattgcaa tcagcatggg atttggccat ttctatggca c 401

```

```

<210> 277
<211> 401
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 227, 333
<223> n = A,T,C or G

```

```

<400> 277
aactttggca acatatctca gcaaaaaacta cagctatggtt attcatgcca aaataaaaagc 60
tgtgcagagg agtggctgca atgagggtcac aacgggtgggtg gatgtaaaaag agatcttcaa 120
gtcctcatca cccatccctc gaactcaagt cccgctcatt acaaattctt cttgccagtg 180
tccacacatc ctgccccatc aagatgttct catcatgtgt tacgagnggc gctcaaggat 240
gatgcttctt gaaaattgct tagttgaaaa atggagagat cagcttagta aaagatccat 300
acagtgggaa gagaggctgc aggaacagcg ganaacagtt caggacaaga agaaaacagc 360
cgggcgccacc agtcgtagta atccccccaa accaaaggga a 401

```

```

<210> 278
<211> 401
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 322, 354
<223> n = A,T,C or G

```

```

<400> 278
aatgagtgtg agaccacaaa tgaatgccgg gaggatgaaa tgtgttggaa ttatcatggc 60
ggcttccgtt gttatccacg aaatccttgt caagatccct acattctaac accagagaaac 120
cgatgtgttt gccagtcctc aaatgccatg tgccgagaaac tgccccagtc aatagtctac 180
aaatacatga gcatccgatc tgataggtct gtgccatcag acatcttcca gatacaggcc 240
acaactatth atgccaacac catcaatact ttctcgatta aatctggaaa tgaaaatgga 300
gagtctacct acgacaacaa anccctgtaa gtgcaatgct tgtgctcgtg aagncattat 360
caggaccaag agaacatatc gtggacctgg agatgctgac a 401

```

```

<210> 279
<211> 401
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 30, 35, 81, 88, 180, 212, 378, 384, 391
<223> n = A,T,C or G

```

```

<400> 279

```

```

aaattattgc ctctgataca tacctaagtn aacanaacat taatacctaa gtaaacataa 60
cattacttgg aggggttcag nttctaantg aaactgtatt tgaaactttt aagtatactt 120
taggaaacaa gcatgaacgg cagtctagaa taccagaaac atctacttgg gtagcttggg 180
gccattatcc tgtggaatct gatatgtctg gnagcatgtc attgatggga catgaagaca 240
tctttggaaa tgatgagatt atttcctgtg ttaaaaaaaaa aaaaaatctt aaattcctac 300
aatgtgaaac tgaaactaat aattttgatc ctgatgtatg ggacagcgta tctgtaccag 360
gctctaaata acaaaaagnta gggngacaag nacatgttcc t 401

```

<210> 280

<211> 326

<212> DNA

<213> Homo sapiens

<400> 280

```

gaagtggaat tgtataattc aattcgataa ttgatctcat gggctttccc tggaggaaag 60
gttttttttg ttgttttttt tttaagaact tgaaacttgt aaactgagat gtctgtagct 120
tttttgccca tctgtagtgt atgtgaagat ttcaaaacct gagagcactt tttctttgtt 180
tagaattatg agaaaggcac tagatgactt taggatttgc atttttccct ttattgcctc 240
atctcttgtg acgccttgtt ggggagggaa atctgtttat tttttcctac aaataaaaag 300
ctaagattct atatcgcaaa aaaaaa 326

```

<210> 281

<211> 374

<212> DNA

<213> Homo sapiens

<400> 281

```

caacgcgttt gcaaatatc ccctggtagc ctacttcctt acccccgaat attggtgaaga 60
tcgagcaatg gcttcaggac atgggttctc ttctcctgtg atcattcaag tgctcactgc 120
atgaagactg gcttgtctca gtgtttcaac ctccaccagg ctgtctcttg gtccacacct 180
cgctccctgt tagtgccgta tgacagcccc catcaaatga ccttggccaa gtcacggttt 240
ctctgtggtc aaggttggtt ggctgattgg tggaaagtag ggtggaccaa aggaggccac 300
gtgagcagtc agcaccagtt ctgcaccagc agcgctccg tcctagtggg tgttcctgtt 360
tctcctggcc ctgg 374

```

<210> 282

<211> 404

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 26, 27, 51, 137, 180, 222

<223> n = A,T,C or G

<400> 282

```

agtgtggtgg aattcccga tcctanncgc cgactcacac aaggcagagt ngccatggag 60
aaaattccag tgtcagcatt cttgtcctt gtggccctct cctacactct ggccagagat 120
accacagtca aacctgnagc caaaaaggac acaaaggact ctcgacccaa actgccccan 180
accctctcca gaggttggg tgaccaactc atctggactc anacatatga agaagctcta 240
tataaatcca agacaagcaa caaaccttg atgattattc atcacttgga tgagtggcca 300
cacagtcaag ctttaaagaa agtgtttgct gaaaataaag aaatccagaa attggcagag 360
cagtttgtcc tcctcaatct ggtttatgaa acaactgaca aaca 404

```

<210> 283  
 <211> 184  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 26  
 <223> n = A,T,C or G

<400> 283  
 agtgtggtgg aattcacttg cttaanttgt gggcaaaaga gaaaaagaag gattgatcag 60  
 agcattgtgc aatacagttt cattaactcc ttccctcgct cccccaaaaa tttgaatttt 120  
 tttttcaaca ctcttacacc tgttatggaa aatgtcaacc tttgtaagaa aacccaaaata 180  
 aaaa 184

<210> 284  
 <211> 421  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 147, 149  
 <223> n = A,T,C or G

<400> 284  
 ctattaatcc tgccacaata tttttaatta cgtacaaaga tctgacatgt caccagggga 60  
 cccatttcac ccaactgctct gtttgccgc cagtcttttg tctctctctt cagcaatggt 120  
 gaggcggata ccctttctctc ggggaanana aatccatggt ttgttgccct tgccaataac 180  
 aaaaatgttg gaaagtcgag tggcaaagct gttgccattg gcattcttca cgtgaaccac 240  
 gtcaaaaagat ccagggtgcc tctctctggt ggtgacaca ccaattcttc ctaggttagc 300  
 acctccagtc accatacaca gggtaccagt gtcgaacttg atgaaatcag taatcttgcc 360  
 agtctctaaa tcaatctgaa tggatatcatt caccttgatg aggggatcgg ggtagcggat 420  
 g 421

<210> 285  
 <211> 361  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 34, 188  
 <223> n = A,T,C or G

<400> 285  
 ctgggtggta actctttatt tcattgtccg gaanaaagat gggagtggga acagggtgga 60  
 cactgtgcag gcttcagctt ccactccggg caggattcag gctatctggg accgcaggga 120  
 ctgccagggt cacagccctg gctcccagg caggcaggca aggtgacggg actggaagcc 180  
 cttttcanag ccttgaggga gctgggtccg ccacaagcaa tgagtgccac tctgcagttt 240  
 gcaggggatg gataaacagg gaaacactgt gcattcttca cagccaacag ttaggttctt 300  
 ggtgaagccc cggcgctgag ctaagctcag gctgttccag ggagccacga aactgcagggt 360  
 a 361

<210> 286  
 <211> 336  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 40, 68, 75, 127, 262  
 <223> n = A,T,C or G

<400> 286  
 tttgagtggc agcgccttta tttgtggggg ccttcaaggn agggctcgtgg ggggcagcgg 60  
 ggaggaanag ccganaaaact gtgtgaccgg ggcctcaggt ggtgggcatt gggggctcct 120  
 cttgcanatg cccattggca tcaccgggtgc agccattggt ggcagcgggt accggtcctt 180  
 tcttgttcaa catagggtag gtggcagcca cgggtccaac tcgcttgagg ctggggccctg 240  
 ggcgctccat tttgtgttcc angagcatgt ggttctgtgg cgggagcccc acgcaggccc 300  
 tgaggatgtt ctcatgacag ctgcgctggc ggaaaa 336

<210> 287  
 <211> 301  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 15, 33, 44, 53, 76, 83, 107, 117, 154, 166, 192, 194, 207,  
 215, 241, 246  
 <223> n = A,T,C or G

<400> 287  
 tgggtaccaaa attnttttat ttgaaggaat ggnacaaatc aaanaactta agnggatgtt 60  
 ttggtacaac ttatanaaaa ggnaaaggaa accccaacat gcatgcnctg ccttgngnac 120  
 cagggaagtc accccacggc tatggggaaa ttancccgag gcttancttt cattatcact 180  
 gtctcccagg gngngcttgt caaaaanata ttccnccaag ccaaattcgg gcgctcccat 240  
 nttgcncaag ttggtcacgt ggtcacccaa ttctttgatg gctttcacct gctcattcag 300  
 g 301

<210> 288  
 <211> 358  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 39, 143, 226  
 <223> n = A,T,C or G

<400> 288  
 aagtttttaa acttttttatt tgcatattaa aaaaattgng cattccaata attaaaatca 60  
 tttgaacaaa aaaaaaaatg gcactctgat taaactgcat tacagcctgc aggacacctt 120  
 gggccagctt ggttttactc tanatttcac tgtcgtccca ccccaattct tccacccac 180  
 ttcttccttc accaacaatgc aagttctttc ctccctgcc agccanatag atagacagat 240  
 gggaaaggca ggcgcggcct tcgttgtcag tagttctttg atgtgaaagg ggcagcacag 300

tcattttaaac ttgatccaac ctcttttgcac cttacaaagt taaacagcta aaagaagt 358

<210> 289  
 <211> 462  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 87, 141, 182, 220, 269, 327  
 <223> n = A,T,C or G

<400> 289  
 ggcatcagaa atgctgttta tttctctgct gctcccaagc tggctggcct ttgcagagga 60  
 gcagacaaca gatgcatagt tgggganaaa gggaggacag gttccaggat agaggggtgca 120  
 ggctgagggga ggaagggtaa naggaaggaa ggccatcctg gatccccaca tttcagtctc 180  
 anatgaggac aaaggggactc ccaagccccc aaatcatcan aaaacaccaa ggagcaggag 240  
 gagcttgagc aggcccccagg gagcctcana gccataccag ccactgtcta cttcccatcc 300  
 tcctctccca ttccctgtct gcttcanacc acctcccagc taagccccag ctccattccc 360  
 ccaatcctgg cccttgccag cttgacagtc acagtgcctg gaattccacc actgaggctt 420  
 ctcccagttg gattaggacg tcgcctctgt agcatgctgc cc 462

<210> 290  
 <211> 481  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 44, 57, 122, 158, 304, 325, 352, 405  
 <223> n = A,T,C or G

<400> 290  
 tacttttcta aacttttatta aagaaaaaag caataagcaa tggnggtaaa tctctanaac 60  
 atacccaatt ttctgggctt cctcccccca gaatgtgaca ttttgatttc caaacatgcc 120  
 anaagtgtat ggttcccaac tgtactaaag taggtganaa gctgaagtcc tcaagtgttc 180  
 atcttccaac ttttcccagt ctgtgggtctg tctttggatc agcaataatt gcctgaacag 240  
 ctactatggc ttcgttgatt tttgtctgta gctctctgag ctctctatg tgcagcaatc 300  
 gcanaatttg agcagcttca ttaanaactg catctcctgt gtcaaaaacca anaatatgtt 360  
 tgtctaaagc aacaggttaag ccctcttttg tttgatttgc cttancaact gcatcctgtg 420  
 tcaggcgctc ctgaacccaa atccgaattg ccttaagcat taccaggtaa tcatcatgac 480  
 g 481

<210> 291  
 <211> 381  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 79, 166, 187, 208, 219, 315  
 <223> n = A,T,C or G

<400> 291

```

tcatagtaat gtaaaacccat ttgtttaatt ctaaatcaaa tcactttcac aacagtgaaa 60
attagtgact gggttaaggng tgccactgta catatcatca ttttctgact ggggtcagga 120
cctggctcta gtccacaagg gtggcaggag gaggggtggag gctaanaaca cagaaaacac 180
acaaaanaaa ggaaagctgc cttggcanaa ggatgaggng gtgagcttgc cgaaggatgg 240
tggaagggg gctccctgtt ggggccgagc caggagtccc aagtcagctc tcctgcctta 300
cttagctcct ggcanagggg gagtggggac ctacgaggtt caaaatcaaa tggcatttgg 360
ccagcctggc tttactaaca g                                     381

```

```

<210> 292
<211> 371
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 32, 55, 72, 151, 189, 292
<223> n = A,T,C or G

```

```

<400> 292
gaaaaaataa tccgtttaat tgaaaaacct gnaggatact attccactcc cccanatgag 60
gaggctgagg anaccaaacc cctacatcac ctctgtagcca cttctgatac tcttcacgag 120
gcagcaggca aagacaattc ccaaaacctc naaaaagca attccaaggg ctgctgcagc 180
taccaccanc acatttttcc tcagccagcc cccaatcttc tccacacagc cctccttatg 240
gatgccttc tcgttgaaat taatcccaca gccacagta acattaatgc ancaggagtc 300
ggggactcgg ttcttcgaca tggaagggat tttctccaa tctgtgtagt tagcagcccc 360
acagcactta a                                     371

```

```

<210> 293
<211> 361
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 75, 196, 222
<223> n = A,T,C or G

```

```

<400> 293
gatttaaaag aaaacacttt attgttcagc aattaaaagt tagccaaata tgtatttttc 60
tccataatth attgngatgt tatcaacatc aagtaaaatg ctcatthtca tcatttgctt 120
ctgttcatgt tttcttgaac acgtcttcaa ttttccttcc aaaatgctgc atgccacact 180
tgaggtaacg aagcanaagt atthtttaaac atgacagcta anaacattca tctacagcaa 240
cctatatgct caatacatgc cgcgtgatcc tagtagthtt ttcacaacct tctacaagtt 300
tttgaaaaac atctgttatg atgactthtca tacactthca cctcaaaggc tttcttgcac 360
c                                     361

```

```

<210> 294
<211> 391
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 26, 77, 96, 150, 203, 252, 254, 264, 276

```

<223> n = A,T,C or G

<400> 294

```
tatttttaaag tttaattatg attcanaaaaa aatcgagcga ataactttct ctgaaaaaat 60
atattgactc tgtatanacc acagttattg gggganaagg gctggtaggt taaattatcc 120
tattttttat tctgaaaatg atattaatan aaagtcccgt ttccagtctg attataaaga 180
tacatatgcc caaaatggct ganaataaat acaacaggaa atgcaaaaagc tgtaaagcta 240
agggcatgca ananaaaatc tcanaatacc caaagnggca acaaggaacg tttggctgga 300
atttgaagtt atttcagtca tctttgtctt tggctccatg tttcaggatg cgtgtgaact 360
cgatgtaatt gaaattcccc tttttatcaa t 391
```

<210> 295

<211> 343

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 145, 174, 205, 232

<223> n = A,T,C or G

<400> 295

```
ttcttttggt ttattgataa cagaaactgt gcataattac agatttgatg aggaatctgc 60
aaataataaa gaatgtgtct actgccagca aaatacaatt attccatgcc ctctcaacat 120
acaaatatag agttcttcac accanatggc tctggtgtaa caaagccatt ttanatgttt 180
aattgtgctt ctacaaaacc ttcanagcat gaggtagttt cttttaccta cnatattttc 240
cacatttcca ttattacact tttagtgagc taaaatcctt ttaacatagc ctgcggatga 300
tctttcacaa aagccaagcc tcatttacaa agggtttatt tct 343
```

<210> 296

<211> 241

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 96, 98, 106, 185

<223> n = A,T,C or G

<400> 296

```
ttcttgata ttggttggtt ttgtgaaaaa gtttttggtt ttcttctcag tcaactgaat 60
tattttctcta ctttgccctc ctgatgccca catgananaa cttaanataa tttctaacag 120
cttcactttt ggaaaaaaaa aaaacctgtt ttctcatgg aaccccagga gttgaaagtg 180
gatanatcgc tctcaaaatc taaggctctg ttcagcttta cattatgtta cctgacgttt 240
t 241
```

<210> 297

<211> 391

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 12, 130

<223> n = A,T,C or G

<400> 297

```
gttgtggctg anaatgctgg agatgctcag ttctctccct cacaaggtag gccacaaatt 60
cttggtgggtg ccctcacatc tgggggtcttc aggcaccagc catgcctgcc gaggagtgtc 120
gtcaggacan accatgtccg tgctaggccc aggcacagcc caaccactcc tcatccaagt 180
ctctcccagg tttctgggtcc cgatgggcaa ggatgacccc tccagtggct ggtacccac 240
catcccacta cccctcacat gctctcactc tccatcaggt ccccaatcct ggcttccctc 300
ttcacgaact ctcaaagaaa aggaaggata aaacctaaat aaaccagaca gaagcagctc 360
tggaaaagta caaaaagaca gccagaggtg t 391
```

<210> 298

<211> 321

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 14, 30, 76, 116, 201, 288, 301

<223> n = A,T,C or G

<400> 298

```
caagccaaac tgtntccagc tttattaaan atactttcca taaacaatca tggatatttca 60
ggcaggacat gggcanacaa tcgttaacag tatacaacaa ctttcaaact cccttnttca 120
atggactacc aaaaatcaaa aagccactat aaaacccaat gaagtcttca tctgatgtc 180
tgaacaggga aagttttaaag ngagggttga catttcacat ttagcatgtt gtttaacaac 240
ttttcacaag ccgaccctga ctttcaggaa gtgaaatgaa aatggcanaa tttatctgaa 300
natccacaat ctaaaaatgg a 321
```

<210> 299

<211> 401

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 104, 268, 347

<223> n = A,T,C or G

<400> 299

```
tatcataaag agtgttgaag tttattttatt atagcaccat tgagacattt tgaaattgga 60
attggtaaaa aaataaaaaca aaaagcattt gaattgtatt tggnggaaca gcaaaaaaag 120
agaagtatca tttttctttg tcaaattata ctgtttccaa acattttgga aataaataac 180
tggaattttg tcggtcactt gcactggttg acaagattag aacaagagga acacatatgg 240
agttaaattt tttttgtttg gatttcanaat agagtttggg ttataaaaag caaacagggc 300
caacgtccac accaaattct tgatcaggac caccaatgtc ataggnggca atatctacaa 360
taggtagtct cacagccttg cgtgttcgat attcaaagac t 401
```

<210> 300

<211> 188

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 48

<223> n = A,T,C or G

<400> 300

```
tgaatgcttt gtcattattaa gaaagttaaa gtgcaataat gtttgaanac aataagtgg 60
ggtgtatctt gtttctaata agataaactt ttttgtcttt gctttatctt attagggagt 120
tgtatgtcag tgtataaaac atactgtgtg gtataacagg cttaataaat tctttaaaag 180
gaaaaaaaa                                     188
```

<210> 301

<211> 291

<212> DNA

<213> Homo sapiens

<400> 301

```
aagattttgt tttattttat tatggctaga aagacactgt tatagccaaa atcggcaatg 60
acactaaaga aatcctctgt gcttttcaat atgcaaata atttcttcca agagttgccc 120
tggtgtgact tcaagagttc atgttaactt cttttctgga aacttccttt tcttagttgt 180
tgtattcttg aagagcctgg gccatgaaga gcttgcctaa gttttgggca gtgaactcct 240
tgatgttctg gcagtaagtg tttatctggc ctgcaatgag cagcgagtcc a          291
```

<210> 302

<211> 341

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 25

<223> n = A,T,C or G

<400> 302

```
tgatttttca taatttttatt aaatnatcac tgggaaaact aatggttcgc gtatcacaca 60
attacactac aatctgatag gagtggtaaa accagccaat ggaatccagg taaagtacaa 120
aaacgccacc ttttattgtc ctgtcttatt tctcgggaag gagggttcta ctttacacat 180
ttcatgagcc agcagtggac ttgagttaca atgtgtaggt tccttgtggg tatagctgca 240
gaagaagcca tcaaattctt gaggacttga catctctcgg aaagaagcaa actagtggat 300
cccccgggct gcaggaattc gatatcaagc ttatcgatac c          341
```

<210> 303

<211> 361

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 15, 27, 92, 124, 127, 183, 198, 244, 320

<223> n = A,T,C or G

<400> 303

```
tgcagacagt aaatnaattt tatttgngtt cacagaacat actaggcgat ctcgacagtc 60
gctccgtgac agcccaccaa cccccaaccc tntacctcgc agccacccta aaggcgactt 120
caanaanatg gaaggatctc acggatctca ttcctaattg tccgccgaag tctcacacag 180
```

```

tanacagacg gagttganat gctggaggat gcagtcacct cctaaactta cgacccacca 240
ccanacttca tcccagccgg gacgtcctcc cccaccogag tcctcccat ttcttctcct 300
actttgccgc agttccaggn gtctgtcttc caccagtccc acaaagctca ataaatacca 360
a 361

```

```

<210> 304
<211> 301
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 23, 104, 192
<223> n = A,T,C or G

```

```

<400> 304
ctctttacaa cagcctttat ttncggccct tgatcctgct cggatgctgg tggaggccct 60
tagctccgcc cgccaggctc tgtgccgcct cccgcaggc gcanattcat gaacacgggtg 120
ctcaggggct tgaggccgta ctccccagc gggagctggg cctccagggg ctccccctcg 180
aaggtcagcc anaacaggtc gtctgcaca ccctccagcc cgctcacttg ctgcttcagg 240
tgggccacgg tctgcgtcag ccgcacctcg taggtgctgc tgcggccctt gttattcctc 300
a 301

```

```

<210> 305
<211> 331
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 3, 36, 60, 193, 223
<223> n = A,T,C or G

```

```

<400> 305
ganaggctag taacatcagt tttattgggt tgggngggca accatagcct ggctgggggn 60
ggggctggcc ctacaggtt gttgagttcc agcagggtct ggtccaagg ctggtgaatc 120
tcgacgttct cctccttggc actggccaag gtctcttcta ggtcatcgat ggttttctcc 180
aactttgcc canacctctc ggcaaaactct gctcgggtct canctcctt cagcttctcc 240
tccaacagtt tgatctcctc ttcataatata tcttcttttg gggaatactc ctctcttgag 300
gccatcaggg acttgagggc ctggtccatg g 331

```

```

<210> 306
<211> 457
<212> DNA
<213> Homo sapiens

```

```

<400> 306
aatatgtaaa ggtaataact tttattatat taaagacaat gcaaacgaaa aacagaattg 60
agcagtgcaa aatttaaagg actgttttgt tctcaaagtt gcaagtttca aagccaaaag 120
aattatatgt atcaaatata taagtataaa aaagtttagc tttcaagcct gtaatcccag 180
cactttggga ggctgaggca ggtggatcac taacattaaa aagacaacat tagattttgt 240
cgatttatag caattttata aatatataac tttgtcactt ggatcctgaa gcaaaataat 300
aaagtgaatt tgggattttt gtacttggtg aaaagtttaa caccctaaat tcacaactag 360
tggatcccc gggtgcagg aattcgatat caagcttacc gataccgtcg acctcgaggg 420

```

ggggcccggt acccaattcg ccctatagtg agtcgta

457

<210> 307

<211> 491

<212> DNA

<213> Homo sapiens

<400> 307

```
gtgcttggac ggaacccggc gctcgttccc caccgccggc ggccgcccac agccagccct 60
ccgtcacctc ttcaccgcac cctcggactg cccaaggcc cccgccgccg ctccagcgcc 120
ggcagccac cgccgccgcc gccgcctctc cttagtgcgc gccatgacga ccgcgtccac 180
ctcgcaggtg cgccagaact accaccagga ctcagaggcc gccatcaacc gccagatcaa 240
cctggagctc tacgcctcct acgtttacct gtccatgtct tactactttg accgcgatga 300
tgtggctttg aagaactttg ccaaatactt tcttcaccaa tctcatgagg agaggggaaca 360
tgctgagaaa ctgatgaagc tgcagaacca acgagggtggc cgaatcttcc ttcaggatat 420
caagaaacca gactgtgatg actgggagag cgggctgaat gcaatggagt gtgcattaca 480
tttgaaaaa a 491
```

<210> 308

<211> 421

<212> DNA

<213> Homo sapiens

<400> 308

```
ctcagcgctt cttctttctt ggtttgatcc tgactgctgt catggcgtgc cctctggaga 60
aggccctgga tgtgatggtg tccaccttcc acaagtactc gggcaaagag ggtgacaagt 120
tcaagctcaa caagtcagaa ctaaaggagc tgctgaccgc ggagctgccc agcttcttgg 180
ggaaaaggac agatgaagct gctttccaga agctgatgag caacttgac agcaacaggg 240
acaacgaggt ggacttccaa gagtactgtg tcttcctgtc ctgcatcgcc atgatgtgta 300
acgaattctt tgaaggcttc ccagataagc agcccaggaa gaaatgaaaa ctctctgat 360
gtggttgggg ggtctgccag ctggggccct ccctgtcgcc agtgggcact ttttttttc 420
c 421
```

<210> 309

<211> 321

<212> DNA

<213> Homo sapiens

<400> 309

```
accaaattggc ggatgacgcc ggtgcagcgg gggggcccg gggccctggt gggccctggga 60
tggggaaccg cgggtggcttc cgcggaggtt tcggcagtgg catccggggc cggggtcgcg 120
gccgtggacg gggccggggc cgaggccgcg gagctcgcg aggcaaggcc gaggataagg 180
agtggatgcc cgtcaccaag ttgggccgct tgggtcaagga catgaagatc aagtccctgg 240
aggagatcta tctcttctcc ctgccatta aggaatcaga gatcattgat ttcttcttgg 300
gggcctctct caaggatgag g 321
```

<210> 310

<211> 381

<212> DNA

<213> Homo sapiens

<400> 310

```
ttaaccagcc atattggctc aataaatagc ttcggtaagg agttaatttc cttctagaaa 60
tcagtgccta tttttcttgg aaactcaatt ttaaatagtc caattccatc tgaagccaag 120
```

```

ctgttgtcat tttcattcgg tgacattctc tcccatgaca cccagaaggg gcagaagaac 180
cacatTTTTc atttatagat gtttgcattc tttgtattaa aattattttg aaggggttgc 240
ctcattggat ggctTTTTTT tttttcctcc agggagaagg ggagaaatgt acttggaaat 300
taatgtatgt ttacatctct ttgcaaattc ctgtacatag agatatattt ttttaagtgtg 360
aatgtaacaa catactgtga a 381

```

```

<210> 311
<211> 538
<212> DNA
<213> Homo sapiens

```

```

<400> 311
tttgaattta caccaagaac ttctcaataa aagaaaatca tgaatgctcc acaatttcaa 60
cataccacaa gagaagttaa tttcttaaca ttgtgttcta tgattatttg taagaccttc 120
accaagttct gatattcttt aaagacatag ttcaaaattg cttttgaaaa tctgtattct 180
tgaaaatata cttgttgtgt attaggtttt taaataccag cttaaaggatt acctcactga 240
gtcatcagta ccttcctatt cagctcccca agatgatgtg tttttgctta ccctaagaga 300
ggttttcttc ttatttttag ataattcaag tgcttagata aattatgttt tctttaagtg 360
tttatggtaa actcttttaa agaaaattta atatgttata gctgaatctt tttggtaact 420
ttaaactctt atcatagact ctgtacatat gttcaaatta gctgcttgcc tgatgtgtgt 480
atcatcggtg ggatgacaga acaaacatat ttatgatcat gaataatgtg ctttgtaa 538

```

```

<210> 312
<211> 176
<212> DNA
<213> Homo sapiens

```

```

<400> 312
ggaggagcag ctgagagata gggtcagtga atgcggttca gcctgctacc tctcctgtct 60
tcatagaacc attgccttag aattattgta tgacacgttt tttgttggtt aagctgtaag 120
gttttgttct ttgtgaacat gggatatttg aggggagggt ggaggagta gggaaag 176

```

```

<210> 313
<211> 396
<212> DNA
<213> Homo sapiens

```

```

<400> 313
ccagcaccac caggccctgg gggacctggg ttctcagact gccaaagaag ccttgccatc 60
tggcgctccc atggctcttg caacatctcc cttcgtttt tgaggggggtc atgccggggg 120
agccaccagc cctcactggg gttcggagga gagtcaggaa gggccaagca cgacaaagca 180
gaaacatcgg atttggggaa cgcgtgtcaa tcccttgtgc cgcagggctg ggcgggagag 240
actgttctgt tccttgtgta actgtgttgc tgaaagacta cctcgttctt gtcttgatgt 300
gtcaccgggg caactgctg ggggcgggga tgggggcagg gtggaagcgg ctccccattt 360
tataccaaag gtgctacatc tatgtgatgg gtggggg 396

```

```

<210> 314
<211> 311
<212> DNA
<213> Homo sapiens

```

```

<400> 314
cctcaacatc ctgagagagg actggaagcc agtccttacg ataaactcca taatttatgg 60
cctgcagtat ctcttcttgg agcccaaccc cgaggacca ctgaacaagg aggccgcaga 120

```

```

ggtcctgcag aacaaccggc ggctgtttga gcagaacgtg cagcgtcca tgcgggggtgg 180
ctacatcggc tccacctact ttgagcgctg cctgaaatag ggttggcgca taccaccccc 240
cgccacggcc acaagccctg gcatccctg caaatattta ttgggggcca tgggtagggg 300
tttggggggc g                                     311

```

```

<210> 315
<211> 336
<212> DNA
<213> Homo sapiens

```

```

<400> 315
tttagaacat ggttatcatc caagactact ctaccctgca acattgaact cccaagagca 60
aatccacatt cctcttgagt tctgcagctt ctgtgtaaat agggcagctg tcgtctatgc 120
cgtagaatca catgatctga ggaccattca tggagctgc taaatagcct agtctgggga 180
gtcttccata aagttttgca tggagcaaac aaacaggatt aaactagggt tggttccttc 240
agccctctaa aagcataggg cttagcctgc aggcttcctt gggctttctc tgtgtgtgta 300
gttttgtaaa cactatagca tctgttaaga tccagt                                     336

```

```

<210> 316
<211> 436
<212> DNA
<213> Homo sapiens

```

```

<400> 316
aacatggtct gcgtgcctta agagagacgc ttcctgcaga acaggacctg actacaaaga 60
atgtttccat tggaattggt ggtaaagact tggagtttac aatctatgat gatgatgatg 120
tgtctccatt cctggaaggt cttgaagaaa gaccacagag aaaggcacag cctgctcaac 180
ctgctgatga acctgcagaa aaggctgatg aaccaatgga acattaagtg ataagccagt 240
ctatatatgt attatcaaat atgtaagaat acaggcacca catactgatg acaataatct 300
atactttgaa ccaaaagttg cagagtgggt gaatgctatg ttttaggaat cagtccagat 360
gtgagttttt tccaagcaac ctactgaaa cctatataat ggaatacatt tttctttgaa 420
agggtctgta taatca                                     436

```

```

<210> 317
<211> 196
<212> DNA
<213> Homo sapiens

```

```

<400> 317
tattccttgt gaagatgata tactatTTTT gttaagcgtg tctgtattta tgtgtgagga 60
gctgctggct tgcagtgcgc gtgcacgtgg agagctgggt cccggagatt ggacggcctg 120
atgctccctc ccctgccctg gtccagggaa gctggccgag ggtcctggct cctgaggggc 180
atctgccct ccccca                                     196

```

```

<210> 318
<211> 381
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 8, 9, 102, 122, 167, 182, 193, 235, 253, 265, 266, 290, 321,
378
<223> n = A,T,C or G

```

&lt;400&gt; 318

```

gacgcttng ccgtaacgat gatcggagac atcctgctgt tcgggacgtt gctgatgaat 60
gccggggcgg tgctgaactt taagctgaaa aagaaggaca cncagggtt tggggaggag 120
tncagggagc ccaacacagg tgacaacatc cggaattct tgctgancct cagatacttt 180
cnaatcttca tcnccctgtg gaacatcttc atgatgttct gcatgattgt gctgntcggc 240
tcttgaatcc cancgatgaa accannaact cactttcccg ggatgccgan tctccattcc 300
tccattcctg atgacttcaa naatgttttt gacaaaaaa cgcacaacct tcccagaaag 360
tccaagctcg tgggtggngg a 381

```

&lt;210&gt; 319

&lt;211&gt; 506

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 319

```

ctaagcttta cgaatggggt gacaacttat gataaaaact agagctagtg aattagccta 60
tttgtaaata cttttgttat aattgatagg atacatcttg gacatggaat tgttaagcca 120
cctctgagca gtgtatgtca ggacttggtc attaggttgg cagcagaggg gcagaaggaa 180
ttatacaggt agagatgtat gcagatgtgt ccataatgt ccataattac attttgatag 240
ccattgatgt atgcatctct tggctgtact ataagaacac attaatcaa tggaaataca 300
ctttgcta attttaattgg tatagatctg ctaatgaatt ctcttaaaaa catactgtat 360
tctgttgctg tgtgtttcat tttaaattga gcattaaggg aatgcagcat ttaaatacaga 420
actctgccaa tgcttttctc tagaggcgtg ttgccatttt tgtcttatat gaaatttctg 480
tccaagaaa ggcaggatta catctt 506

```

&lt;210&gt; 320

&lt;211&gt; 351

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 320

```

ctgacctgca ggacgaaacc atgaagagcc tgatccttct tgccatcctg gccgccttag 60
cggtagtaac tttgtgttat gaatcacatg aaagcatgga atcttatgaa cttaatccct 120
tcattaacag gagaaatgca aataccttca tatccctca gcagagatgg agagctaaag 180
tccaagagag gatccgagaa cgctctaagc ctgtccacga gctcaatagg gaagcctgtg 240
atgactacag actttgcgaa cgctacgcca tggtttatgg atacaatgct gcctataatc 300
gctacttcag gaagcgccga gggaccaaat gagactgagg gaagaaaaaa a 351

```

&lt;210&gt; 321

&lt;211&gt; 421

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 321

```

ctcggaggcg ttcagctgct tcaagatgaa gctgaacatc tccttcccag ccaactggctg 60
ccagaaaactc attgaagtgg acgatgaacg caaacttcgt actttctatg agaagcgtat 120
ggccacagaa gttgctgctg acgctctggg tgaagaatgg aagggttatg tgggtccgaat 180
cagtgggtgg aacgacaaac aagggtttccc catgaagcag ggtgtcttga cccatggccg 240
tgtccgcctg ctactgagta aggggcattc ctgttacaga ccaaggagaa ctggagaaag 300
aaagagaaaa tcagttcgtg gttgcattgt ggatgcaaat ctgagcgttc tcaacttggg 360
tattgtaaaa aaaggagaga aggatattcc tggactgact gatactacag tgcctcgccg 420
c 421

```

<210> 322  
 <211> 521  
 <212> DNA  
 <213> Homo sapiens

<400> 322  
 agcagctctc ctgccacagc tcctcacccc ctgaaaatgt tcgcctgctc caagtttgtc 60  
 tccactccct ccttgggtcaa gagcacctca cagctgctga gccgtccgct atctgcagtg 120  
 gtgctgaaac gaccggagat actgacagat gagagcctca gcagcttggc agtctcatgt 180  
 ccccttacct cacttgtctc tagccgcagc ttccaaacca gcgccatttc aagggacatc 240  
 gacacagcag ccaagtccat tggagctggg gctgccacag ttgggggtggc tggttcttggg 300  
 gctgggattg gaactgtgtt tgggagcctc atcattgggt atgccaggaa cctttctctg 360  
 aagcaacagc tcttctccta cgccattctg ggctttgccc tctcggaggc catggggctc 420  
 ttttgtctga tggtagcctt tctcatcctc tttgccatgt gaaggagccg tctccacctc 480  
 ccatagttct ccgcgctctg gttggccccg tgtgttcctt t 521

<210> 323  
 <211> 435  
 <212> DNA  
 <213> Homo sapiens

<400> 323  
 ccgaggtcgc acgcgtgaga cttctccgcc gcagacgccg ccgcgatgcg ctacgtcggc 60  
 tcctacctgc tggtgcctt agggggcaac tcctccccc gcgccaagga catcaagaag 120  
 atcttggaca gcgtgggtat cgaggcggac gacgaccggc tcaacaaggt tatcagttag 180  
 ctgaatggaa aaaacattga agacgtcatt gcccagggtt ttggcaagct tgccagtgtg 240  
 cctgctggtg gggtgttagc cgtctctgct gccccaggct ctgcagcccc tgctgctggt 300  
 tctgcccctg ctgcagcaga ggagaagaaa gatgagaaga aggaggagtc tgaagagtca 360  
 gatgatgaca tgggatttgg cttttttgat taaattcctg ctcccctgca aataaagcct 420  
 ttttacacat ctcaa 435

<210> 324  
 <211> 521  
 <212> DNA  
 <213> Homo sapiens

<400> 324  
 aggagatcga ctttcggtgc ccgcaagacc agggctggaa cgccgagatc acgctgcaga 60  
 tgggtgcagta caagaatcgt caggccatcc tggcggtcaa atccacgcgg cagaagcagc 120  
 agcacctggt ccagcagcag ccccccctgc agccgcagcc gcagccgcag ctccagcccc 180  
 aaccccagcc tcagcctcag ccgcaacccc agccccaatc acaaccccag cctcagcccc 240  
 aacccaagcc tcagccccag cagctccacc cgtatccgca tccacatcca catccacact 300  
 ctcatcctca ctgcaccca caccctcacc cgcaccgca tccgcaccaa ataccgcacc 360  
 cacaccaca gccgcactcg cagccgcacg ggcaccggt tctccgcagc acctccaaact 420  
 ctgcctgaaa ggggcagctc ccgggcaaga caaggttttg aggacttgag gaagtgggac 480  
 gagcacattt ctattgtctt cacttgatc aaaagcaaaa c 521

<210> 325  
 <211> 451  
 <212> DNA  
 <213> Homo sapiens

<400> 325  
 attttcattt ccattaacct ggaagctttc atgaatatc tcttctttta aaacatttta 60

```

acattatttta aacagaaaaa gatgggctct ttctggtttag ttgttacatg atagcagaga 120
tatttttact tagattactt tgggaatgag agattgttgt cttgaactct ggcactgtac 180
agtgaatgtg tctgtagttg tgttagtttg cattaagcat gtataacatt caagtatgtc 240
atccaaataa gaggcataata cattgaattg tttttaatcc tctgacaagt tgactcttcg 300
acccccaccc ccaccaaga cattttaata gtaaataagag agagagagaa gagttaatga 360
acatgaggta gtgttccact ggcaggatga cttttcaata gctcaaatca atttcagtgc 420
ctttatcact tgaattatta acttaatttg a 451

```

<210> 326

<211> 421

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 296

<223> n = A,T,C or G

<400> 326

```

cgcggtcgta agggctgagg atttttggtc cgcacgctcc tgctcctgac tcaccgctgt 60
tcgctctcgc cgaggaacaa gtcggtcagg aagcccgcg cgaacagcca tggcttttaa 120
ggataccgga aaaacacccg tggagccgga ggtggcaatt caccgaattc gaatcacctc 180
aacaagccgc aacgtaaaat ccttggaaaa ggtgtgtgct gacttgataa gaggcgcaaa 240
agaaaagaat ctcaaagtga aaggaccagt tcgaatgcct accaagactt tgagantcac 300
tacaagaaaa actccttggt gtgaagggtc taagacgtgg gatcgtttcc agatgagaat 360
tcacaagcga ctcatcgact tgcacagtc ttctgagatt gttaagcaga ttacttccat 420
c 421

```

<210> 327

<211> 456

<212> DNA

<213> Homo sapiens

<400> 327

```

atcttgacga ggctgcggtg tctgctgcta ttctccgagc ttcgcaatgc cgcctaagga 60
cgacaagaag aagaaggacg ctggaaagtc ggccaagaaa gacaaagacc cagtgaacaa 120
atccgggggc aaggccaaaa agaagaagtg gtccaaaggc aaagttcggg acaagctcaa 180
taacttagtc ttgtttgaca aagctaccta tgataaactc tgtaaggaag ttcccaacta 240
taaacttata accccagctg tggctctctga gagactgaag attcgaggct ccctggccag 300
ggcagccctt caggagctcc ttagtaaaagg acttatcaaa ctggtttcaa agcacagagc 360
tcaagtaatt tacaccagaa ataccaaggg tggagatgct ccagctgctg gtgaagatgc 420
atgaataggt ccaaccagct gtacatttgg aaaaat 456

```

<210> 328

<211> 471

<212> DNA

<213> Homo sapiens

<400> 328

```

gtggaagtga catcgctctt aaaccctgcg tggcaatccc tgacgcaccg ccgtgatgcc 60
caggaagac agggcgacct ggaagtccaa ctacttcctt aagatcatcc aactattgga 120
tgattatccg aaatgtttca ttgtgggagc agacaatgtg ggctccaagc agatgcagca 180
gatccgcatg tcccttcgcg ggaaggctgt ggtgctgatg ggcaagaaca ccatgatgcg 240
caaggccatc cgagggcacc tggaaaacaa cccagctctg gagaaactgc tgctcatat 300

```

```

ccgggggaat gtgggctttg tgttcaccaa ggaggacctc actgagatca gggacatggt 360
gctggccaat aaggtgccag ctgctgcccc tgctgggtgcc attgccccat gtgaagtcac 420
tgtgccagcc cagaacactg gtctcggggc cgagaagacc tcctttttcc a 471

```

<210> 329

<211> 278

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> 154, 204

<223> n = A,T,C or G

<400> 329

```

gtttaaactt aagcttggtg ccgagctcgg atccactagt ccagtgtggt ggaattctag 60
aaattgagat gcccccccag gccagcaaat gttccttttt gttcaaagtc tattttttatt 120
ccttgatatt tttctttttt tttttttttt ttgnggatgg ggacttgtga attttttctaa 180
aggtgctatt taacatggga gganagcgtg tgcggtccca gcccagcccg ctgctcactt 240
tccaccctct ctccacctgc ctctggcttc tcaggcct 278

```

<210> 330

<211> 338

<212> DNA

<213> Homo sapiens

<400> 330

```

ctcaggcttc aacatcgaat acgccgcagg ccccttcgcc ctattcttca tagccgaata 60
cacaaacatt attataataa acaccctcac cactacaatc ttcttaggaa caacatatga 120
cgcactctcc cctgaactct acacaacata ttttgtcacc aagaccctac ttctaacctc 180
cctgtttctta tgaattcgaa cagcataccc ccgattccgc tacgaccaac tcatacacct 240
cctatgaaaa aacttcctac cactcaccct agcattactt atatgatatg tctccatacc 300
cattacaatc tccagcattc cccctcaaac ctaaaaaa 338

```

<210> 331

<211> 2820

<212> DNA

<213> Homo sapiens

<400> 331

```

tggcaaaaatc ctggagccag aagaaaggac agcagcattg atcaatctta cagctaacat 60
gttgtagctg gaaaacaatg cccagactca atttagttag ccacagtaca cgaacctggg 120
gctcctgaac agcatggacc agcagattcg gaacggctcc tcgtccacca gtccctataa 180
cacagaccac gcgcagaaca gcgtcacggc gccctcgccc tacgcacagc ccagccccac 240
cttcgatgct ctctctccat caccgcctat cccctccaac accgactacc caggccccga 300
cagttccgac gtgtccttcc agcagtcgag caccgccaa gtcggccacct ggacgtattc 360
cactgaactg aagaaactct actgccaaat tgcaaagaca tgccccatcc agatcaaggt 420
gatgacccca cctcctcagg gagctgttat ccgcgccatg cctgtctaca aaaaagctga 480
gcacgtcacg gaggtggtga agcgggtgcc caaccatgag ctgagccgtg agttcaacga 540
gggacagatt gccctccta gtcatttgat tcgagtagag gggaacagcc atgcccagta 600
tgtagaagat cccatcacag gaagacagag tgtgtggtga ccttatgagc caccgccagg 660
tggcactgaa ttcacgacag tcttgtagaa tttcatgtgt aacagcagtt gtgttgagg 720
gatgaaccgc cgtccaattt taatcattgt tactctggaa accagagatg ggcaagtcct 780
gggccgacgc tgctttgagg cccggatctg tgcttgccca ggaagagaca ggaaggcgga 840

```

```

tgaagatagc atcagaaagc agcaagtttc ggacagtaca aagaacgggtg atggtacgaa 900
gcgcccgttt cgtcagaaca cacatggtat ccagatgaca tccatcaaga aacgaagatc 960
cccagatgat gaactgttat acttaccagt gaggggccgt gagacttatg aaatgctgtt 1020
gaagatcaaa gagtccttgg aactcatgca gtaccttcct cagcacacaa ttgaaacgta 1080
caggcaacag caacagcagc agcaccagca cttacttcag aaacagacct caatacagtc 1140
tccatcttca tatggtaaca gctccccacc tctgaacaaa atgaacagca tgaacaagct 1200
gccttctgtg agccagctta tcaaccctca gcagcgcaac gccctcactc ctacaacccat 1260
tcctgatggc atgggagcca acattcccat gatgggcacc cacatgccaa tggctggaga 1320
catgaatgga ctacgccccca cccaggcact ccctcccca ctctccatgc catccacctc 1380
ccactgcaca cccccacctc cgtatcccac agattgcagc attgtcagtt tcttagcgag 1440
gttgggctgt tcatcatgtc tggactatth cagcaccagc gggctgacca ccatctatca 1500
gattgagcat tactccatgg atgatctggc aagtctgaaa atccctgagc aatttcgaca 1560
tgcgatctgg aagggcattc tggaccaccg gcagctccac gaattctcct ccccttctca 1620
tctcctgcgg accccaagca gtgcctctac agtcagtgtg ggctccagtg agaccggggg 1680
tgagcgtgtt attgatctg tgcgattcac cctccgccag accatctctt tcccaccccg 1740
agatgagtgg aatgacttca actttgacat ggatgctcgc cgcaataagc aacagcgcat 1800
caaagaggag ggggagttag cctcaccatg tgagctcttc ctatccctct cctaactgcc 1860
agccccctaa aagcactcct gcttaatctt caaagccttc tccctagctc ctcccccttc 1920
tcttgtctga tttcttaggg gaaggagaag taagaggcta cctcttacct aacatctgac 1980
ctggcatcta attctgattc tggctttaag ccttcaaaac tatagcttgc agaactgtag 2040
ctgccatggc taggtagaag tgagcaaaaa agagttgggt gtctccttaa gctgcagaga 2100
tttctcattg acttttataa agcatgttca cccttatagt ctaagactat atatataaat 2160
gtataaatat acagtataga tttttgggtg gggggcattg agtattgttt aaaatgtaat 2220
ttaaatgaaa gaaaattgag ttgcacttat tgaccatttt ttaatttact tgttttggtg 2280
ggcttgtcta tactccttcc ctttaaggggt atcatgtatg gtgataggta tctagagctt 2340
aatgctacat gtgagtgcga tgatgtacag attctttcag ttctttggat tctaaataca 2400
tgccacatca aacctttgag tagatccatt tccattgctt attatgtagg taagactgta 2460
gatatgtatt cttttctcag tgttggtata ttttatatta ctgacatttc ttctagtgat 2520
gatggttcac gttggggtga tttaatccag ttataagaag aagttcatgt ccaaacggtc 2580
ctcttttagtt tttgggtggg aatgaggaaa attcttaaaa ggcccatagc agccagttca 2640
aaaacacccg acgtcatgta tttgagcata tcagtaaccc ccttaaatth aatacccaga 2700
taccttatct tacaatgttg attgggaaaa catttgctgc ccattacaga ggtattaaaa 2760
ctaaatttca ctactagatt gactaactca aatacacatt tgctactggt gtaagaattc 2820

```

<210> 332  
 <211> 2270  
 <212> DNA  
 <213> Homo sapiens

```

<400> 332
tcgttgatat caaagacagt tgaaggaaat gaattttgaa acttcacgggt gtgccaccct 60
acagtactgc cctgaccctt acatccagcg tttcgtagaa acccagctca tttctcttgg 120
aaagaaagtt attaccgatc caccatgtcc cagagcacac agacaaatga attcctcagt 180
ccagaggttt tccagcatat ctgggatttt ctggaacagc ctatatgttc agttcagccc 240
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 334

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&lt;213&gt; Homo sapiens

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&lt;213&gt; Homo sapiens

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gttggcactg aattcacgac agtcttgtag aatttcatgt gtaacagcag ttgtgttga 660
gggatgaacc gccgtccaat tttaatcatt gttactctgg aaaccagaga tgggcaagtc 720
ctgggcccgc gctgctttga ggcccggatc tgtgcttgcc caggaagaga caggaaggcg 780
gatgaagata gcatcagaaa gcagcaagtt tcggacagta caaagaacgg tgatggtacg 840
aagcgccggt ttcgtcagaa cacacatggt atccagatga catccatcaa gaaacgaaga 900
tccccagatg atgaactggt atacttacca gtgaggggcc gtgagactta tgaaatgctg 960
ttgaagatca aagagtccct ggaactcatg cagtaccttc ctcagcacac aattgaaacg 1020
tacaggcaac agcaacagca gcagcaccag cacttacttc agaaacagac ctcaatacag 1080
tctccatctt catatggtaa cagctcccca cctctgaaca aaatgaacag catgaacaag 1140
ctgccttctg tgagccagct tatcaaccct cagcagcgca acgcccctac tcctacaacc 1200
attcctgatg gcatgggagc caacattccc atgatgggca cccacatgcc aatggctgga 1260
gacatgaatg gactcagccc caccagggca ctccctcccc cactctccat gccatccacc 1320
tcccactgca cccccccacc tccgtatccc acagattgca gcattgtcag gatctggcaa 1380
gtctga 1386

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<210> 337  
 <211> 1551  
 <212> DNA  
 <213> Homo sapiens

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<400> 337
atgtcccaga gcacacagac aaatgaattc ctcagtcag aggtttttcca gcataatctgg 60
gattttctgg aacagcctat atgttcagtt cagccattg acttgaactt tgtggatgaa 120
ccatcagaag atggtgcgac aaacaagatt gagattagca tggactgtat ccgcatgcag 180
gactcggacc tgagtgaccc catgtggcca cagtacacga acctggggct cctgaacagc 240
atggaccagc agattcagaa cggctcctcg tccaccagtc cctataacac agaccacgcg 300
cagaacagcg tcacggcgcc ctgcgcctac gcacagccca gctccacctt cgatgctctc 360
tctccatcac ccgccatccc ctccaacacc gactaccag gccgcacag tttcgacgtg 420
tccttccagc agtcgagcac cgccaagtcg gccacctgga cgtattccac tgaactgaag 480
aaactctact gccaaattgc aaagacatgc cccatccaga tcaaggtgat gacccacct 540
cctcagggag ctgttatccg cgccatgcct gtctacaaaa aagctgagca cgtcacggag 600
gtggtgaagc ggtgccccaa ccatgagctg agccgtgaat tcaacgaggg acagattgcc 660
cctcctagtc atttgattcg agtagagggg aacagccatg cccagtatgt agaagatccc 720
atcacaggaa gacagagtgt gctggtacct tatgagccac cccaggttg cactgaattc 780
acgacagtct tgtacaattt catgtgtaac agcagttgtg ttggagggat gaaccgccgt 840
ccaattttta tcattgttac tctggaaacc agagatgggc aagtccctgg cgcagcgtgc 900
tttgaggccc ggatctgtgc ttgcccagga agagacagga aggcgatga agatagcatc 960
agaaagcagc aagtttcgga cagtacaaag aacggtgatg gtacgaagcg cccgtttcgt 1020
cagaacacac atggtatcca gatgacatcc atcaagaaac gaagatcccc agatgatgaa 1080
ctgttatact taccagtga gggccgtgag ccttctcag tgctgttgaa gatcaaagag 1140
tccctggaac tcatgcagta ccttctcag cacacaattg aaacgtacag gcaacagcaa 1200
cagcagcagc accagcactt acttcagaaa cagacctcaa tacagtctcc atcttcatat 1260
ggtaacagct cccacctct gaacaaaatg aacagcatga acaagctgcc ttctgtgagc 1320
cagcttatca accctcagca gcgcaacgcc ctactccta caaccattcc tgatggcatg 1380

```

```

ggagccaaca ttcccatgat gggcaccac atgccaatgg ctggagacat gaatggactc 1440
agccccaccc aggcaactccc tccccactc tccatgccat ccacctccca ctgcacaccc 1500
ccacctccgt atccacaga ttgcagcatt gtcaggatct ggcaagtctg a 1551

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<210> 338  
 <211> 586  
 <212> PRT  
 <213> Homo sapiens

```

<400> 338
Met Leu Tyr Leu Glu Asn Asn Ala Gln Thr Gln Phe Ser Glu Pro Gln
1      5      10      15
Tyr Thr Asn Leu Gly Leu Leu Asn Ser Met Asp Gln Gln Ile Arg Asn
20     25     30
Gly Ser Ser Ser Thr Ser Pro Tyr Asn Thr Asp His Ala Gln Asn Ser
35     40     45
Val Thr Ala Pro Ser Pro Tyr Ala Gln Pro Ser Pro Thr Phe Asp Ala
50     55     60
Leu Ser Pro Ser Pro Ala Ile Pro Ser Asn Thr Asp Tyr Pro Gly Pro
65     70     75     80
His Ser Ser Asp Val Ser Phe Gln Gln Ser Ser Thr Ala Lys Ser Ala
85     90     95
Thr Trp Thr Tyr Ser Thr Glu Leu Lys Lys Leu Tyr Cys Gln Ile Ala
100    105    110
Lys Thr Cys Pro Ile Gln Ile Lys Val Met Thr Pro Pro Pro Gln Gly
115    120    125
Ala Val Ile Arg Ala Met Pro Val Tyr Lys Lys Ala Glu His Val Thr
130    135    140
Glu Val Val Lys Arg Cys Pro Asn His Glu Leu Ser Arg Glu Phe Asn
145    150    155    160
Glu Gly Gln Ile Ala Pro Pro Ser His Leu Ile Arg Val Glu Gly Asn
165    170    175
Ser His Ala Gln Tyr Val Glu Asp Pro Ile Thr Gly Arg Gln Ser Val
180    185    190
Leu Val Pro Tyr Glu Pro Pro Gln Val Gly Thr Glu Phe Thr Thr Val
195    200    205
Leu Tyr Asn Phe Met Cys Asn Ser Ser Cys Val Gly Gly Met Asn Arg
210    215    220
Arg Pro Ile Leu Ile Ile Val Thr Leu Glu Thr Arg Asp Gly Gln Val
225    230    235    240
Leu Gly Arg Arg Cys Phe Glu Ala Arg Ile Cys Ala Cys Pro Gly Arg
245    250    255
Asp Arg Lys Ala Asp Glu Asp Ser Ile Arg Lys Gln Gln Val Ser Asp
260    265    270
Ser Thr Lys Asn Gly Asp Gly Thr Lys Arg Pro Phe Arg Gln Asn Thr
275    280    285
His Gly Ile Gln Met Thr Ser Ile Lys Lys Arg Arg Ser Pro Asp Asp
290    295    300
Glu Leu Leu Tyr Leu Pro Val Arg Gly Arg Glu Thr Tyr Glu Met Leu
305    310    315    320
Leu Lys Ile Lys Glu Ser Leu Glu Leu Met Gln Tyr Leu Pro Gln His
325    330    335
Thr Ile Glu Thr Tyr Arg Gln Gln Gln Gln Gln His Gln His Leu
340    345    350

```

Leu Gln Lys Gln Thr Ser Ile Gln Ser Pro Ser Ser Tyr Gly Asn Ser  
 355 360 365  
 Ser Pro Pro Leu Asn Lys Met Asn Ser Met Asn Lys Leu Pro Ser Val  
 370 375 380  
 Ser Gln Leu Ile Asn Pro Gln Gln Arg Asn Ala Leu Thr Pro Thr Thr  
 385 390 395 400  
 Ile Pro Asp Gly Met Gly Ala Asn Ile Pro Met Met Gly Thr His Met  
 405 410 415  
 Pro Met Ala Gly Asp Met Asn Gly Leu Ser Pro Thr Gln Ala Leu Pro  
 420 425 430  
 Pro Pro Leu Ser Met Pro Ser Thr Ser His Cys Thr Pro Pro Pro  
 435 440 445  
 Tyr Pro Thr Asp Cys Ser Ile Val Ser Phe Leu Ala Arg Leu Gly Cys  
 450 455 460  
 Ser Ser Cys Leu Asp Tyr Phe Thr Thr Gln Gly Leu Thr Thr Ile Tyr  
 465 470 475 480  
 Gln Ile Glu His Tyr Ser Met Asp Asp Leu Ala Ser Leu Lys Ile Pro  
 485 490 495  
 Glu Gln Phe Arg His Ala Ile Trp Lys Gly Ile Leu Asp His Arg Gln  
 500 505 510  
 Leu His Glu Phe Ser Ser Pro Ser His Leu Leu Arg Thr Pro Ser Ser  
 515 520 525  
 Ala Ser Thr Val Ser Val Gly Ser Ser Glu Thr Arg Gly Glu Arg Val  
 530 535 540  
 Ile Asp Ala Val Arg Phe Thr Leu Arg Gln Thr Ile Ser Phe Pro Pro  
 545 550 555 560  
 Arg Asp Glu Trp Asn Asp Phe Asn Phe Asp Met Asp Ala Arg Arg Asn  
 565 570 575  
 Lys Gln Gln Arg Ile Lys Glu Glu Gly Glu  
 580 585

<210> 339  
 <211> 641  
 <212> PRT  
 <213> Homo sapiens

<400> 339  
 Met Ser Gln Ser Thr Gln Thr Asn Glu Phe Leu Ser Pro Glu Val Phe  
 1 5 10 15  
 Gln His Ile Trp Asp Phe Leu Glu Gln Pro Ile Cys Ser Val Gln Pro  
 20 25 30  
 Ile Asp Leu Asn Phe Val Asp Glu Pro Ser Glu Asp Gly Ala Thr Asn  
 35 40 45  
 Lys Ile Glu Ile Ser Met Asp Cys Ile Arg Met Gln Asp Ser Asp Leu  
 50 55 60  
 Ser Asp Pro Met Trp Pro Gln Tyr Thr Asn Leu Gly Leu Leu Asn Ser  
 65 70 75 80  
 Met Asp Gln Gln Ile Gln Asn Gly Ser Ser Thr Ser Pro Tyr Asn  
 85 90 95  
 Thr Asp His Ala Gln Asn Ser Val Thr Ala Pro Ser Pro Tyr Ala Gln  
 100 105 110  
 Pro Ser Ser Thr Phe Asp Ala Leu Ser Pro Ser Pro Ala Ile Pro Ser  
 115 120 125

Asn	Thr	Asp	Tyr	Pro	Gly	Pro	His	Ser	Phe	Asp	Val	Ser	Phe	Gln	Gln
130						135					140				
Ser	Ser	Thr	Ala	Lys	Ser	Ala	Thr	Trp	Thr	Tyr	Ser	Thr	Glu	Leu	Lys
145					150					155					160
Lys	Leu	Tyr	Cys	Gln	Ile	Ala	Lys	Thr	Cys	Pro	Ile	Gln	Ile	Lys	Val
				165					170					175	
Met	Thr	Pro	Pro	Pro	Gln	Gly	Ala	Val	Ile	Arg	Ala	Met	Pro	Val	Tyr
			180					185					190		
Lys	Lys	Ala	Glu	His	Val	Thr	Glu	Val	Val	Lys	Arg	Cys	Pro	Asn	His
		195					200					205			
Glu	Leu	Ser	Arg	Glu	Phe	Asn	Glu	Gly	Gln	Ile	Ala	Pro	Pro	Ser	His
	210					215					220				
Leu	Ile	Arg	Val	Glu	Gly	Asn	Ser	His	Ala	Gln	Tyr	Val	Glu	Asp	Pro
225					230					235					240
Ile	Thr	Gly	Arg	Gln	Ser	Val	Leu	Val	Pro	Tyr	Glu	Pro	Pro	Gln	Val
				245					250					255	
Gly	Thr	Glu	Phe	Thr	Thr	Val	Leu	Tyr	Asn	Phe	Met	Cys	Asn	Ser	Ser
			260					265					270		
Cys	Val	Gly	Gly	Met	Asn	Arg	Arg	Pro	Ile	Leu	Ile	Ile	Val	Thr	Leu
	275						280					285			
Glu	Thr	Arg	Asp	Gly	Gln	Val	Leu	Gly	Arg	Arg	Cys	Phe	Glu	Ala	Arg
	290					295					300				
Ile	Cys	Ala	Cys	Pro	Gly	Arg	Asp	Arg	Lys	Ala	Asp	Glu	Asp	Ser	Ile
305					310					315					320
Arg	Lys	Gln	Gln	Val	Ser	Asp	Ser	Thr	Lys	Asn	Gly	Asp	Gly	Thr	Lys
				325					330					335	
Arg	Pro	Phe	Arg	Gln	Asn	Thr	His	Gly	Ile	Gln	Met	Thr	Ser	Ile	Lys
		340						345					350		
Lys	Arg	Arg	Ser	Pro	Asp	Asp	Glu	Leu	Leu	Tyr	Leu	Pro	Val	Arg	Gly
		355					360					365			
Arg	Glu	Thr	Tyr	Glu	Met	Leu	Leu	Lys	Ile	Lys	Glu	Ser	Leu	Glu	Leu
	370					375					380				
Met	Gln	Tyr	Leu	Pro	Gln	His	Thr	Ile	Glu	Thr	Tyr	Arg	Gln	Gln	Gln
385					390					395					400
Gln	Gln	Gln	His	Gln	His	Leu	Leu	Gln	Lys	Gln	Thr	Ser	Ile	Gln	Ser
			405						410					415	
Pro	Ser	Ser	Tyr	Gly	Asn	Ser	Ser	Pro	Pro	Leu	Asn	Lys	Met	Asn	Ser
			420					425					430		
Met	Asn	Lys	Leu	Pro	Ser	Val	Ser	Gln	Leu	Ile	Asn	Pro	Gln	Gln	Arg
		435					440					445			
Asn	Ala	Leu	Thr	Pro	Thr	Thr	Ile	Pro	Asp	Gly	Met	Gly	Ala	Asn	Ile
	450					455					460				
Pro	Met	Met	Gly	Thr	His	Met	Pro	Met	Ala	Gly	Asp	Met	Asn	Gly	Leu
465					470					475					480
Ser	Pro	Thr	Gln	Ala	Leu	Pro	Pro	Pro	Leu	Ser	Met	Pro	Ser	Thr	Ser
			485						490					495	
His	Cys	Thr	Pro	Pro	Pro	Pro	Tyr	Pro	Thr	Asp	Cys	Ser	Ile	Val	Gly
			500					505					510		
Phe	Leu	Ala	Arg	Leu	Gly	Cys	Ser	Ser	Cys	Leu	Asp	Tyr	Phe	Thr	Thr
		515					520					525			
Gln	Gly	Leu	Thr	Thr	Ile	Tyr	Gln	Ile	Glu	His	Tyr	Ser	Met	Asp	Asp
	530					535					540				
Leu	Ala	Ser	Leu	Lys	Ile	Pro	Glu	Gln	Phe	Arg	His	Ala	Ile	Trp	Lys
545					550					555					560

[illegible]

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<210> 340
<211> 448
<212> PRT
<213> Homo sapiens
```

<400> 340

Met 1	Ser	Gln	Ser	Thr 5	Gln	Thr	Asn	Glu	Phe 10	Leu	Ser	Pro	Glu	Val 15	Phe
Gln	His	Ile	Trp 20	Asp	Phe	Leu	Glu	Gln	Pro	Ile	Cys	Ser	Val	Gln	Pro
Ile	Asp	Leu	Asn 35	Phe	Val	Asp	Glu	Pro	Ser	Glu	Asp	Gly	Ala	Thr	Asn
Lys	Ile	Glu	Ile	Ser	Met	Asp	Cys	Ile	Arg	Met	Gln	Asp	Ser	Asp	Leu
Ser 65	Asp	Pro	Met	Trp 70	Pro	Gln	Tyr	Thr	Asn	Leu	Gly	Leu	Leu	Asn	Ser
Met	Asp	Gln	Gln	Ile 85	Gln	Asn	Gly	Ser	Ser	Ser	Thr	Ser	Pro	Tyr	Asn
Thr	Asp	His	Ala 100	Gln	Asn	Ser	Val	Thr	Ala	Pro	Ser	Pro	Tyr	Ala	Gln
Pro	Ser	Ser	Thr 115	Phe	Asp	Ala	Leu	Ser	Pro	Ser	Pro	Ala	Ile	Pro	Ser
Asn	Thr	Asp	Tyr	Pro	Gly	Pro	His	Ser	Phe	Asp	Val	Ser	Phe	Gln	Gln
Ser 145	Ser	Thr	Ala	Lys 150	Ser	Ala	Thr	Trp	Thr	Tyr	Ser	Thr	Glu	Leu	Lys
Lys	Leu	Tyr	Cys	Gln 165	Ile	Ala	Lys	Thr	Cys	Pro	Ile	Gln	Ile	Lys	Val
Met	Thr	Pro	Pro 180	Pro	Gln	Gly	Ala	Val	Ile	Arg	Ala	Met	Pro	Val	Tyr
Lys	Lys	Ala	Glu 195	His	Val	Thr	Glu	Val	Val	Lys	Arg	Cys	Pro	Asn	His
Glu	Leu	Ser	Arg	Glu	Phe	Asn	Glu	Gly	Gln	Ile	Ala	Pro	Pro	Ser	His
Leu 225	Ile	Arg	Val	Glu	Gly 230	Asn	Ser	His	Ala	Gln	Tyr	Val	Glu	Asp	Pro
Ile	Thr	Gly	Arg	Gln 245	Ser	Val	Leu	Val	Pro	Tyr	Glu	Pro	Pro	Gln	Val
Gly	Thr	Glu	Phe 260	Thr	Thr	Val	Leu	Tyr	Asn	Phe	Met	Cys	Asn	Ser	Ser

Cys	Val	Gly	Gly	Met	Asn	Arg	Arg	Pro	Ile	Leu	Ile	Ile	Val	Thr	Leu
		275					280					285			
Glu	Thr	Arg	Asp	Gly	Gln	Val	Leu	Gly	Arg	Arg	Cys	Phe	Glu	Ala	Arg
		290					295				300				
Ile	Cys	Ala	Cys	Pro	Gly	Arg	Asp	Arg	Lys	Ala	Asp	Glu	Asp	Ser	Ile
305					310				315						320
Arg	Lys	Gln	Gln	Val	Ser	Asp	Ser	Thr	Lys	Asn	Gly	Asp	Gly	Thr	Lys
				325					330					335	
Arg	Pro	Phe	Arg	Gln	Asn	Thr	His	Gly	Ile	Gln	Met	Thr	Ser	Ile	Lys
			340					345					350		
Lys	Arg	Arg	Ser	Pro	Asp	Asp	Glu	Leu	Leu	Tyr	Leu	Pro	Val	Arg	Gly
		355					360					365			
Arg	Glu	Thr	Tyr	Glu	Met	Leu	Leu	Lys	Ile	Lys	Glu	Ser	Leu	Glu	Leu
		370				375					380				
Met	Gln	Tyr	Leu	Pro	Gln	His	Thr	Ile	Glu	Thr	Tyr	Arg	Gln	Gln	Gln
385					390				395						400
Gln	Gln	Gln	His	Gln	His	Leu	Leu	Gln	Lys	His	Leu	Leu	Ser	Ala	Cys
			405						410					415	
Phe	Arg	Asn	Glu	Leu	Val	Glu	Pro	Arg	Arg	Glu	Thr	Pro	Lys	Gln	Ser
			420					425					430		
Asp	Val	Phe	Phe	Arg	His	Ser	Lys	Pro	Pro	Asn	Arg	Ser	Val	Tyr	Pro
		435					440					445			

<210> 341  
 <211> 356  
 <212> PRT  
 <213> Homo sapiens

<400> 341

Met	Leu	Tyr	Leu	Glu	Asn	Asn	Ala	Gln	Thr	Gln	Phe	Ser	Glu	Pro	Gln
1				5				10					15		
Tyr	Thr	Asn	Leu	Gly	Leu	Leu	Asn	Ser	Met	Asp	Gln	Gln	Ile	Gln	Asn
			20					25					30		
Gly	Ser	Ser	Ser	Thr	Ser	Pro	Tyr	Asn	Thr	Asp	His	Ala	Gln	Asn	Ser
		35					40					45			
Val	Thr	Ala	Pro	Ser	Pro	Tyr	Ala	Gln	Pro	Ser	Ser	Thr	Phe	Asp	Ala
	50					55					60				
Leu	Ser	Pro	Ser	Pro	Ala	Ile	Pro	Ser	Asn	Thr	Asp	Tyr	Pro	Gly	Pro
65					70				75						80
His	Ser	Phe	Asp	Val	Ser	Phe	Gln	Gln	Ser	Ser	Thr	Ala	Lys	Ser	Ala
			85						90				95		
Thr	Trp	Thr	Tyr	Ser	Thr	Glu	Leu	Lys	Lys	Leu	Tyr	Cys	Gln	Ile	Ala
			100					105					110		
Lys	Thr	Cys	Pro	Ile	Gln	Ile	Lys	Val	Met	Thr	Pro	Pro	Pro	Gln	Gly
		115					120					125			
Ala	Val	Ile	Arg	Ala	Met	Pro	Val	Tyr	Lys	Lys	Ala	Glu	His	Val	Thr
		130					135				140				
Glu	Val	Val	Lys	Arg	Cys	Pro	Asn	His	Glu	Leu	Ser	Arg	Glu	Phe	Asn
145					150				155						160
Glu	Gly	Gln	Ile	Ala	Pro	Pro	Ser	His	Leu	Ile	Arg	Val	Glu	Gly	Asn
			165						170					175	
Ser	His	Ala	Gln	Tyr	Val	Glu	Asp	Pro	Ile	Thr	Gly	Arg	Gln	Ser	Val
			180					185					190		

```

Leu Val Pro Tyr Glu Pro Pro Gln Val Gly Thr Glu Phe Thr Thr Val
    195                                200                205
Leu Tyr Asn Phe Met Cys Asn Ser Ser Cys Val Gly Gly Met Asn Arg
    210                                215                220
Arg Pro Ile Leu Ile Ile Val Thr Leu Glu Thr Arg Asp Gly Gln Val
    225                                230                235                240
Leu Gly Arg Arg Cys Phe Glu Ala Arg Ile Cys Ala Cys Pro Gly Arg
    245                                250                255
Asp Arg Lys Ala Asp Glu Asp Ser Ile Arg Lys Gln Gln Val Ser Asp
    260                                265                270
Ser Thr Lys Asn Gly Asp Gly Thr Lys Arg Pro Ser Arg Gln Asn Thr
    275                                280                285
His Gly Ile Gln Met Thr Ser Ile Lys Lys Arg Arg Ser Pro Asp Asp
    290                                295                300
Glu Leu Leu Tyr Leu Pro Val Arg Gly Arg Glu Thr Tyr Glu Met Leu
    305                                310                315                320
Leu Lys Ile Lys Glu Ser Leu Glu Leu Met Gln Tyr Leu Pro Gln His
    325                                330                335
Thr Ile Glu Thr Tyr Arg Gln Gln Gln Gln Gln His Gln His Leu
    340                                345                350
Leu Gln Lys Gln
    355

```

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<210> 342
<211> 680
<212> PRT
<213> Homo sapiens

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<400> 342
Met Asn Phe Glu Thr Ser Arg Cys Ala Thr Leu Gln Tyr Cys Pro Asp
  1          5          10          15
Pro Tyr Ile Gln Arg Phe Val Glu Thr Pro Ala His Phe Ser Trp Lys
    20          25          30
Glu Ser Tyr Tyr Arg Ser Thr Met Ser Gln Ser Thr Gln Thr Asn Glu
    35          40          45
Phe Leu Ser Pro Glu Val Phe Gln His Ile Trp Asp Phe Leu Glu Gln
    50          55          60
Pro Ile Cys Ser Val Gln Pro Ile Asp Leu Asn Phe Val Asp Glu Pro
    65          70          75          80
Ser Glu Asp Gly Ala Thr Asn Lys Ile Glu Ile Ser Met Asp Cys Ile
    85          90          95
Arg Met Gln Asp Ser Asp Leu Ser Asp Pro Met Trp Pro Gln Tyr Thr
    100         105         110
Asn Leu Gly Leu Leu Asn Ser Met Asp Gln Gln Ile Gln Asn Gly Ser
    115         120         125
Ser Ser Thr Ser Pro Tyr Asn Thr Asp His Ala Gln Asn Ser Val Thr
    130         135         140
Ala Pro Ser Pro Tyr Ala Gln Pro Ser Ser Thr Phe Asp Ala Leu Ser
    145         150         155         160
Pro Ser Pro Ala Ile Pro Ser Asn Thr Asp Tyr Pro Gly Pro His Ser
    165         170         175
Phe Asp Val Ser Phe Gln Gln Ser Ser Thr Ala Lys Ser Ala Thr Trp
    180         185         190

```

Thr	Tyr	Ser	Thr	Glu	Leu	Lys	Lys	Leu	Tyr	Cys	Gln	Ile	Ala	Lys	Thr
		195					200					205			
Cys	Pro	Ile	Gln	Ile	Lys	Val	Met	Thr	Pro	Pro	Pro	Gln	Gly	Ala	Val
	210					215					220				
Ile	Arg	Ala	Met	Pro	Val	Tyr	Lys	Lys	Ala	Glu	His	Val	Thr	Glu	Val
225					230					235					240
Val	Lys	Arg	Cys	Pro	Asn	His	Glu	Leu	Ser	Arg	Glu	Phe	Asn	Glu	Gly
				245					250					255	
Gln	Ile	Ala	Pro	Pro	Ser	His	Leu	Ile	Arg	Val	Glu	Gly	Asn	Ser	His
			260					265					270		
Ala	Gln	Tyr	Val	Glu	Asp	Pro	Ile	Thr	Gly	Arg	Gln	Ser	Val	Leu	Val
	275						280					285			
Pro	Tyr	Glu	Pro	Pro	Gln	Val	Gly	Thr	Glu	Phe	Thr	Thr	Val	Leu	Tyr
	290					295					300				
Asn	Phe	Met	Cys	Asn	Ser	Ser	Cys	Val	Gly	Gly	Met	Asn	Arg	Arg	Pro
305					310					315					320
Ile	Leu	Ile	Ile	Val	Thr	Leu	Glu	Thr	Arg	Asp	Gly	Gln	Val	Leu	Gly
				325					330					335	
Arg	Arg	Cys	Phe	Glu	Ala	Arg	Ile	Cys	Ala	Cys	Pro	Gly	Arg	Asp	Arg
			340					345					350		
Lys	Ala	Asp	Glu	Asp	Ser	Ile	Arg	Lys	Gln	Gln	Val	Ser	Asp	Ser	Thr
	355						360					365			
Lys	Asn	Gly	Asp	Gly	Thr	Lys	Arg	Pro	Phe	Arg	Gln	Asn	Thr	His	Gly
	370					375					380				
Ile	Gln	Met	Thr	Ser	Ile	Lys	Lys	Arg	Arg	Ser	Pro	Asp	Asp	Glu	Leu
385					390					395					400
Leu	Tyr	Leu	Pro	Val	Arg	Gly	Arg	Glu	Thr	Tyr	Glu	Met	Leu	Leu	Lys
			405						410					415	
Ile	Lys	Glu	Ser	Leu	Glu	Leu	Met	Gln	Tyr	Leu	Pro	Gln	His	Thr	Ile
			420					425					430		
Glu	Thr	Tyr	Arg	Gln	Gln	Gln	Gln	Gln	Gln	His	Gln	His	Leu	Leu	Gln
	435						440					445			
Lys	Gln	Thr	Ser	Ile	Gln	Ser	Pro	Ser	Ser	Tyr	Gly	Asn	Ser	Ser	Pro
	450					455					460				
Pro	Leu	Asn	Lys	Met	Asn	Ser	Met	Asn	Lys	Leu	Pro	Ser	Val	Ser	Gln
465					470					475					480
Leu	Ile	Asn	Pro	Gln	Gln	Arg	Asn	Ala	Leu	Thr	Pro	Thr	Thr	Ile	Pro
			485						490					495	
Asp	Gly	Met	Gly	Ala	Asn	Ile	Pro	Met	Met	Gly	Thr	His	Met	Pro	Met
			500					505				510			
Ala	Gly	Asp	Met	Asn	Gly	Leu	Ser	Pro	Thr	Gln	Ala	Leu	Pro	Pro	Pro
	515						520					525			
Leu	Ser	Met	Pro	Ser	Thr	Ser	Gln	Cys	Thr	Pro	Pro	Pro	Pro	Tyr	Pro
	530					535					540				
Thr	Asp	Cys	Ser	Ile	Val	Ser	Phe	Leu	Ala	Arg	Leu	Gly	Cys	Ser	Ser
545					550					555					560
Cys	Leu	Asp	Tyr	Phe	Thr	Thr	Gln	Gly	Leu	Thr	Thr	Ile	Tyr	Gln	Ile
				565					570					575	
Glu	His	Tyr	Ser	Met	Asp	Asp	Leu	Ala	Ser	Leu	Lys	Ile	Pro	Glu	Gln
			580					585					590		
Phe	Arg	His	Ala	Ile	Trp	Lys	Gly	Ile	Leu	Asp	His	Arg	Gln	Leu	His
	595						600					605			
Glu	Phe	Ser	Ser	Pro	Ser	His	Leu	Leu	Arg	Thr	Pro	Ser	Ser	Ala	Ser
	610					615					620				

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Thr Val Ser Val Gly Ser Ser Glu Thr Arg Gly Glu Arg Val Ile Asp
625          630          635          640
Ala Val Arg Phe Thr Leu Arg Gln Thr Ile Ser Phe Pro Pro Arg Asp
          645          650          655
Glu Trp Asn Asp Phe Asn Phe Asp Met Asp Ala Arg Arg Asn Lys Gln
          660          665          670
Gln Arg Ile Lys Glu Glu Gly Glu
          675          680

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<210> 343
<211> 461
<212> PRT
<213> Homo sapiens

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<400> 343
Met Leu Tyr Leu Glu Asn Asn Ala Gln Thr Gln Phe Ser Glu Pro Gln
 1          5          10          15
Tyr Thr Asn Leu Gly Leu Leu Asn Ser Met Asp Gln Gln Ile Gln Asn
          20          25          30
Gly Ser Ser Ser Thr Ser Pro Tyr Asn Thr Asp His Ala Gln Asn Ser
          35          40          45
Val Thr Ala Pro Ser Pro Tyr Ala Gln Pro Ser Ser Thr Phe Asp Ala
          50          55          60
Leu Ser Pro Ser Pro Ala Ile Pro Ser Asn Thr Asp Tyr Pro Gly Pro
65          70          75          80
His Ser Phe Asp Val Ser Phe Gln Gln Ser Ser Thr Ala Lys Ser Ala
          85          90          95
Thr Trp Thr Tyr Ser Thr Glu Leu Lys Lys Leu Tyr Cys Gln Ile Ala
          100          105          110
Lys Thr Cys Pro Ile Gln Ile Lys Val Met Thr Pro Pro Gln Gly
          115          120          125
Ala Val Ile Arg Ala Met Pro Val Tyr Lys Lys Ala Glu His Val Thr
          130          135          140
Glu Val Val Lys Arg Cys Pro Asn His Glu Leu Ser Arg Glu Phe Asn
145          150          155          160
Glu Gly Gln Ile Ala Pro Pro Ser His Leu Ile Arg Val Glu Gly Asn
          165          170          175
Ser His Ala Gln Tyr Val Glu Asp Pro Ile Thr Gly Arg Gln Ser Val
          180          185          190
Leu Val Pro Tyr Glu Pro Pro Gln Val Gly Thr Glu Phe Thr Thr Val
          195          200          205
Leu Tyr Asn Phe Met Cys Asn Ser Ser Cys Val Gly Gly Met Asn Arg
          210          215          220
Arg Pro Ile Leu Ile Ile Val Thr Leu Glu Thr Arg Asp Gly Gln Val
225          230          235          240
Leu Gly Arg Arg Cys Phe Glu Ala Arg Ile Cys Ala Cys Pro Gly Arg
          245          250          255
Asp Arg Lys Ala Asp Glu Asp Ser Ile Arg Lys Gln Gln Val Ser Asp
          260          265          270
Ser Thr Lys Asn Gly Asp Gly Thr Lys Arg Pro Phe Arg Gln Asn Thr
          275          280          285
His Gly Ile Gln Met Thr Ser Ile Lys Lys Arg Arg Ser Pro Asp Asp
          290          295          300

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Glu Leu Leu Tyr Leu Pro Val Arg Gly Arg Glu Thr Tyr Glu Met Leu  
 305 310 315 320  
 Leu Lys Ile Lys Glu Ser Leu Glu Leu Met Gln Tyr Leu Pro Gln His  
 325 330 335  
 Thr Ile Glu Thr Tyr Arg Gln Gln Gln Gln Gln His Gln His Leu  
 340 345 350  
 Leu Gln Lys Gln Thr Ser Ile Gln Ser Pro Ser Ser Tyr Gly Asn Ser  
 355 360 365  
 Ser Pro Pro Leu Asn Lys Met Asn Ser Met Asn Lys Leu Pro Ser Val  
 370 375 380  
 Ser Gln Leu Ile Asn Pro Gln Gln Arg Asn Ala Leu Thr Pro Thr Thr  
 385 390 395 400  
 Ile Pro Asp Gly Met Gly Ala Asn Ile Pro Met Met Gly Thr His Met  
 405 410 415  
 Pro Met Ala Gly Asp Met Asn Gly Leu Ser Pro Thr Gln Ala Leu Pro  
 420 425 430  
 Pro Pro Leu Ser Met Pro Ser Thr Ser His Cys Thr Pro Pro Pro Pro  
 435 440 445  
 Tyr Pro Thr Asp Cys Ser Ile Val Arg Ile Trp Gln Val  
 450 455 460

<210> 344  
 <211> 516  
 <212> PRT  
 <213> Homo sapiens

<400> 344  
 Met Ser Gln Ser Thr Gln Thr Asn Glu Phe Leu Ser Pro Glu Val Phe  
 1 5 10 15  
 Gln His Ile Trp Asp Phe Leu Glu Gln Pro Ile Cys Ser Val Gln Pro  
 20 25 30  
 Ile Asp Leu Asn Phe Val Asp Glu Pro Ser Glu Asp Gly Ala Thr Asn  
 35 40 45  
 Lys Ile Glu Ile Ser Met Asp Cys Ile Arg Met Gln Asp Ser Asp Leu  
 50 55 60  
 Ser Asp Pro Met Trp Pro Gln Tyr Thr Asn Leu Gly Leu Leu Asn Ser  
 65 70 75 80  
 Met Asp Gln Gln Ile Gln Asn Gly Ser Ser Ser Thr Ser Pro Tyr Asn  
 85 90 95  
 Thr Asp His Ala Gln Asn Ser Val Thr Ala Pro Ser Pro Tyr Ala Gln  
 100 105 110  
 Pro Ser Ser Thr Phe Asp Ala Leu Ser Pro Ser Pro Ala Ile Pro Ser  
 115 120 125  
 Asn Thr Asp Tyr Pro Gly Pro His Ser Phe Asp Val Ser Phe Gln Gln  
 130 135 140  
 Ser Ser Thr Ala Lys Ser Ala Thr Trp Thr Tyr Ser Thr Glu Leu Lys  
 145 150 155 160  
 Lys Leu Tyr Cys Gln Ile Ala Lys Thr Cys Pro Ile Gln Ile Lys Val  
 165 170 175  
 Met Thr Pro Pro Pro Gln Gly Ala Val Ile Arg Ala Met Pro Val Tyr  
 180 185 190  
 Lys Lys Ala Glu His Val Thr Glu Val Val Lys Arg Cys Pro Asn His  
 195 200 205

Glu Leu Ser Arg Glu Phe Asn Glu Gly Gln Ile Ala Pro Pro Ser His  
 210 215 220  
 Leu Ile Arg Val Glu Gly Asn Ser His Ala Gln Tyr Val Glu Asp Pro  
 225 230 235 240  
 Ile Thr Gly Arg Gln Ser Val Leu Val Pro Tyr Glu Pro Pro Gln Val  
 245 250 255  
 Gly Thr Glu Phe Thr Thr Val Leu Tyr Asn Phe Met Cys Asn Ser Ser  
 260 265 270  
 Cys Val Gly Gly Met Asn Arg Arg Pro Ile Leu Ile Ile Val Thr Leu  
 275 280 285  
 Glu Thr Arg Asp Gly Gln Val Leu Gly Arg Arg Cys Phe Glu Ala Arg  
 290 295 300  
 Ile Cys Ala Cys Pro Gly Arg Asp Arg Lys Ala Asp Glu Asp Ser Ile  
 305 310 315 320  
 Arg Lys Gln Gln Val Ser Asp Ser Thr Lys Asn Gly Asp Gly Thr Lys  
 325 330 335  
 Arg Pro Phe Arg Gln Asn Thr His Gly Ile Gln Met Thr Ser Ile Lys  
 340 345 350  
 Lys Arg Arg Ser Pro Asp Asp Glu Leu Leu Tyr Leu Pro Val Arg Gly  
 355 360 365  
 Arg Glu Thr Tyr Glu Met Leu Leu Lys Ile Lys Glu Ser Leu Glu Leu  
 370 375 380  
 Met Gln Tyr Leu Pro Gln His Thr Ile Glu Thr Tyr Arg Gln Gln Gln  
 385 390 395 400  
 Gln Gln Gln His Gln His Leu Leu Gln Lys Gln Thr Ser Ile Gln Ser  
 405 410 415  
 Pro Ser Ser Tyr Gly Asn Ser Ser Pro Pro Leu Asn Lys Met Asn Ser  
 420 425 430  
 Met Asn Lys Leu Pro Ser Val Ser Gln Leu Ile Asn Pro Gln Gln Arg  
 435 440 445  
 Asn Ala Leu Thr Pro Thr Thr Ile Pro Asp Gly Met Gly Ala Asn Ile  
 450 455 460  
 Pro Met Met Gly Thr His Met Pro Met Ala Gly Asp Met Asn Gly Leu  
 465 470 475 480  
 Ser Pro Thr Gln Ala Leu Pro Pro Pro Leu Ser Met Pro Ser Thr Ser  
 485 490 495  
 His Cys Thr Pro Pro Pro Pro Tyr Pro Thr Asp Cys Ser Ile Val Arg  
 500 505 510  
 Ile Trp Gln Val  
 515

<210> 345  
 <211> 1800  
 <212> DNA  
 <213> Homo sapiens

<400> 345  
 ggcgcctcatt gccactgcag tgactaaagc tgggaagacg ctgggtcagtt cacctgcccc 60  
 actggttggtt ttttaaacaa attctgatac aggcgacatc ctactgacc gagcaaagat 120  
 tgacattcgt atcatcactg tgcaccattg gcttctaggc actccagtg gtaggagaa 180  
 ggaggtctga aaccctcgca gagggatctt gccctcattc tttgggtctg aaacactggc 240  
 agtcgttga aacaggactc agggataaac cagcgcaatg gattggggga cgctgcacac 300  
 tttcatcggg ggtgtcaaca aacactccac cagcatcggg aaggtgtgga tcacagtcac 360

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ctttattttc cgagtcatga tcctagtggg ggctgcccag gaagtgtggg gtgacgagca 420
agaggacttc gtctgcaaca cactgcaacc gggatgcaaa aatgtgtgct atgaccactt 480
tttcccgggtg tcccacatcc ggctgtgggc cctccagctg atcttcgtct ccaccccagc 540
gctgctgggtg gccatgcatg tggcctacta caggcacgaa accactcgca agttcaggcg 600
aggagagaag aggaatgatt tcaaagacat agaggacatt aaaaagcaca aggttcggat 660
agagggggtcg ctgtgggtgga cgtacaccag cagcatcttt ttccgaatca tctttgaagc 720
agcctttatg tatgtgtttt acttccttta caatgggtac cacctgccct ggggtgtgaa 780
atgtgggatt gacccctgcc ccaaccttgt tgactgcttt atttctaggc caacagagaa 840
gaccgtgttt accattttta tgatttctgc gtctgtgatt tgcattgctgc ttaacgtggc 900
agagttgtgc tacctgctgc tgaaagtgtg ttttaggaga tcaaagagag cacagacgca 960
aaaaaatcac cccaatcatg ccctaaagga gagtaagcag aatgaaatga atgagctgat 1020
ttcagatagt ggtcaaaatg caatcacagg tttcccaagc taaacatttc aaggtaaaat 1080
gtagctgctg cataaggaga cttctgtctt ctccagaagg caataccaac ctgaaagtgc 1140
cttctgtagc ctgaagagtt tgtaaataac tttcataata aatagacact tgagttaact 1200
ttttgttaga tacttgctcc attcatcac aacgtaatca aatatgtggg ccatctctga 1260
aaacaagaga ctgcttgaca aaggagcatt gcagtcactt tgacagggtc cttttaagtgc 1320
gactctctga caaagtgggt actttctgaa aatttatata actgttggtg ataaggaaca 1380
tttatccagg aattgatacg tttattagga aaagatattt ttataggctt ggatgttttt 1440
agttccgact ttgaatttat ataaagtatt tttataatga ctggtcttcc ttacctggaa 1500
aaacatgcga tgtaggtttt agaattacac cacaagtatc taaatttcca acttacaag 1560
ggctctatct tgtaaataat gttttgcatt gtctgttggc aaatttgtga actgtcatga 1620
tacgcttaag gtgggaaagt gttcattgca caatatattt ttactgcttt ctgaatgtag 1680
acggaacagt gtggaagcag aaggcttttt taactcatcc gtttggccga tcgttgacga 1740
ccactgggag atgtggatgt ggttgccctcc tttgtctcgt ccccggtggc taacccttct 1800

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<210> 346  
<211> 261  
<212> PRT  
<213> Homo sapiens

```

<400> 346
Met Asp Trp Gly Thr Leu His Thr Phe Ile Gly Gly Val Asn Lys His
 1           5           10          15
Ser Thr Ser Ile Gly Lys Val Trp Ile Thr Val Ile Phe Ile Phe Arg
      20           25           30
Val Met Ile Leu Val Val Ala Ala Gln Glu Val Trp Gly Asp Glu Gln
      35           40           45
Glu Asp Phe Val Cys Asn Thr Leu Gln Pro Gly Cys Lys Asn Val Cys
      50           55           60
Tyr Asp His Phe Phe Pro Val Ser His Ile Arg Leu Trp Ala Leu Gln
      65           70           75           80
Leu Ile Phe Val Ser Thr Pro Ala Leu Leu Val Ala Met His Val Ala
      85           90           95
Tyr Tyr Arg His Glu Thr Thr Arg Lys Phe Arg Arg Gly Glu Lys Arg
      100          105          110
Asn Asp Phe Lys Asp Ile Glu Asp Ile Lys Lys His Lys Val Arg Ile
      115          120          125
Glu Gly Ser Leu Trp Trp Thr Tyr Thr Ser Ser Ile Phe Phe Arg Ile
      130          135          140
Ile Phe Glu Ala Ala Phe Met Tyr Val Phe Tyr Phe Leu Tyr Asn Gly
      145          150          155          160
Tyr His Leu Pro Trp Val Leu Lys Cys Gly Ile Asp Pro Cys Pro Asn
      165          170          175

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Leu	Val	Asp	Cys	Phe	Ile	Ser	Arg	Pro	Thr	Glu	Lys	Thr	Val	Phe	Thr
			180					185					190		
Ile	Phe	Met	Ile	Ser	Ala	Ser	Val	Ile	Cys	Met	Leu	Leu	Asn	Val	Ala
		195					200						205		
Glu	Leu	Cys	Tyr	Leu	Leu	Leu	Lys	Val	Cys	Phe	Arg	Arg	Ser	Lys	Arg
	210					215					220				
Ala	Gln	Thr	Gln	Lys	Asn	His	Pro	Asn	His	Ala	Leu	Lys	Glu	Ser	Lys
225					230					235					240
Gln	Asn	Glu	Met	Asn	Glu	Leu	Ile	Ser	Asp	Ser	Gly	Gln	Asn	Ala	Ile
				245					250					255	
Thr	Gly	Phe	Pro	Ser											
			260												

&lt;210&gt; 347

&lt;211&gt; 1740

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 347

atgaacaaac	tgtatatcgg	aaacctcagc	gagaacgccg	ccccctcgga	cctagaaaagt	60
atcttcaagg	acgccaagat	cccggtgtcg	ggacccttcc	tggtgaagac	tggtctacgcg	120
ttcgtggact	gcccggacga	gagctgggccc	ctcaaggcca	tcgaggcgct	ttcaggtaaa	180
atagaactgc	acgggaaacc	catagaagtt	gagcactcgg	tcccaaaaag	gcaaaggatt	240
cggaaacttc	agatacgaaa	tatccgcgct	catttacagt	gggaggtgct	ggatagttaa	300
ctagtccagt	atggagtggg	ggagagctgt	gagcaagtga	acactgactc	ggaaactgca	360
gttgtaaatg	taacctattc	cagtaaggac	caagctagac	aagcactaga	caaactgaat	420
ggatttcagt	tagagaatth	caccttgaaa	gtagcctata	tccctgatga	aacggccgcc	480
cagcaaaacc	ccttgacgca	gccccgaggt	cgccgggggc	ttgggcagag	gggctcctca	540
aggcaggggt	ctccaggatc	cgtatccaag	cagaaaccat	gtgatttgcc	tctgcgcctg	600
ctggttccca	cccaatttgt	tggagccatc	ataggaaaag	aaggtgccac	cattcggaac	660
atcaccaaac	agaccagtc	taaaatcgat	gtccaccgta	aagaaaatgc	gggggtgtgt	720
gagaagtcga	ttactatcct	ctctactcct	gaaggcacct	ctgcggcttg	taagtctatt	780
ctggagatta	tgcataagga	agctcaagat	ataaaaattca	cagaagagat	ccccttgaag	840
atttttagctc	ataataactt	tggttgacgt	cttattggta	aagaaggaag	aaatcttaaa	900
aaaattgagc	aagacacaga	cactaaaatc	acgatatctc	cattgcagga	attgacgctg	960
tataatccag	aacgcactat	tacagttaaa	ggcaatgttg	agacatgtgc	caaagctgag	1020
gaggagatca	tgaagaaaat	cagggagtct	tatgaaaatg	atattgcttc	tatgaatctt	1080
caagcacatt	taattcctgg	attaaatctg	aacgccttgg	gtctgttccc	accacttca	1140
gggatgccac	ctcccacctc	agggccccct	tcagccatga	ctcctcccta	cccgcagttt	1200
gagcaatcag	aaacggagac	tgttcatctg	tttatccag	ctctatcagt	cggtgccatc	1260
atcggaagc	agggccagca	catcaagcag	ctttctcgct	ttgctggagc	ttcaattaag	1320
attgctccag	cggaagcacc	agatgctaaa	gtgaggatgg	tgattatcac	tggaccacca	1380
gaggctcagt	tcaaggctca	gggaagaatt	tatggaaaaa	ttaaagaaga	aaactttgtt	1440
agtccataag	aagaggtgaa	acttgaagct	catatcagag	tgccatcctt	tgctgctggc	1500
agagttattg	gaaaaggagg	caaaacggtg	aatgaacttc	agaatttgct	aagtgcagaa	1560
gttggtgtcc	ctcgtgacca	gacacctgat	gagaatgacc	aagtgggtgt	caaaataact	1620
ggtcacttct	atgcttgcca	ggttgcccag	agaaaaattc	aggaaattct	gactcaggta	1680
aagcagcacc	aacaacagaa	ggctctgcaa	agtggaccac	ctcagtcagg	acggaagtaa	1740

&lt;210&gt; 348

&lt;211&gt; 579

&lt;212&gt; PRT

<213> Homo sapiens

<400> 348

Met 1	Asn	Lys	Leu	Tyr 5	Ile	Gly	Asn	Leu	Ser 10	Glu	Asn	Ala	Ala	Pro 15	Ser
Asp	Leu	Glu	Ser	Ile	Phe	Lys	Asp	Ala	Lys	Ile	Pro	Val	Ser	Gly	Pro
			20					25					30		
Phe	Leu	Val	Lys	Thr	Gly	Tyr	Ala	Phe	Val	Asp	Cys	Pro	Asp	Glu	Ser
		35					40					45			
Trp	Ala	Leu	Lys	Ala	Ile	Glu	Ala	Leu	Ser	Gly	Lys	Ile	Glu	Leu	His
	50					55					60				
Gly	Lys	Pro	Ile	Glu	Val	Glu	His	Ser	Val	Pro	Lys	Arg	Gln	Arg	Ile
65					70					75				80	
Arg	Lys	Leu	Gln	Ile	Arg	Asn	Ile	Pro	Pro	His	Leu	Gln	Trp	Glu	Val
				85					90					95	
Leu	Asp	Ser	Leu	Leu	Val	Gln	Tyr	Gly	Val	Val	Glu	Ser	Cys	Glu	Gln
			100					105					110		
Val	Asn	Thr	Asp	Ser	Glu	Thr	Ala	Val	Val	Asn	Val	Thr	Tyr	Ser	Ser
			115				120					125			
Lys	Asp	Gln	Ala	Arg	Gln	Ala	Leu	Asp	Lys	Leu	Asn	Gly	Phe	Gln	Leu
	130					135					140				
Glu	Asn	Phe	Thr	Leu	Lys	Val	Ala	Tyr	Ile	Pro	Asp	Glu	Thr	Ala	Ala
145					150					155				160	
Gln	Gln	Asn	Pro	Leu	Gln	Gln	Pro	Arg	Gly	Arg	Arg	Gly	Leu	Gly	Gln
				165					170					175	
Arg	Gly	Ser	Ser	Arg	Gln	Gly	Ser	Pro	Gly	Ser	Val	Ser	Lys	Gln	Lys
			180					185					190		
Pro	Cys	Asp	Leu	Pro	Leu	Arg	Leu	Leu	Val	Pro	Thr	Gln	Phe	Val	Gly
		195					200					205			
Ala	Ile	Ile	Gly	Lys	Glu	Gly	Ala	Thr	Ile	Arg	Asn	Ile	Thr	Lys	Gln
	210					215					220				
Thr	Gln	Ser	Lys	Ile	Asp	Val	His	Arg	Lys	Glu	Asn	Ala	Gly	Ala	Ala
225					230					235				240	
Glu	Lys	Ser	Ile	Thr	Ile	Leu	Ser	Thr	Pro	Glu	Gly	Thr	Ser	Ala	Ala
				245					250					255	
Cys	Lys	Ser	Ile	Leu	Glu	Ile	Met	His	Lys	Glu	Ala	Gln	Asp	Ile	Lys
			260					265					270		
Phe	Thr	Glu	Glu	Ile	Pro	Leu	Lys	Ile	Leu	Ala	His	Asn	Asn	Phe	Val
		275					280					285			
Gly	Arg	Leu	Ile	Gly	Lys	Glu	Gly	Arg	Asn	Leu	Lys	Lys	Ile	Glu	Gln
	290					295					300				
Asp	Thr	Asp	Thr	Lys	Ile	Thr	Ile	Ser	Pro	Leu	Gln	Glu	Leu	Thr	Leu
305					310					315				320	
Tyr	Asn	Pro	Glu	Arg	Thr	Ile	Thr	Val	Lys	Gly	Asn	Val	Glu	Thr	Cys
				325					330					335	
Ala	Lys	Ala	Glu	Glu	Glu	Ile	Met	Lys	Lys	Ile	Arg	Glu	Ser	Tyr	Glu
			340					345					350		
Asn	Asp	Ile	Ala	Ser	Met	Asn	Leu	Gln	Ala	His	Leu	Ile	Pro	Gly	Leu

```

                405                410                415
Val Gly Ala Ile Ile Gly Lys Gln Gly Gln His Ile Lys Gln Leu Ser
                420                425                430
Arg Phe Ala Gly Ala Ser Ile Lys Ile Ala Pro Ala Glu Ala Pro Asp
                435                440                445
Ala Lys Val Arg Met Val Ile Ile Thr Gly Pro Pro Glu Ala Gln Phe
                450                455                460
Lys Ala Gln Gly Arg Ile Tyr Gly Lys Ile Lys Glu Glu Asn Phe Val
465                470                475                480
Ser Pro Lys Glu Glu Val Lys Leu Glu Ala His Ile Arg Val Pro Ser
                485                490                495
Phe Ala Ala Gly Arg Val Ile Gly Lys Gly Gly Lys Thr Val Asn Glu
                500                505                510
Leu Gln Asn Leu Ser Ser Ala Glu Val Val Val Pro Arg Asp Gln Thr
                515                520                525
Pro Asp Glu Asn Asp Gln Val Val Val Lys Ile Thr Gly His Phe Tyr
                530                535                540
Ala Cys Gln Val Ala Gln Arg Lys Ile Gln Glu Ile Leu Thr Gln Val
545                550                555                560
Lys Gln His Gln Gln Gln Lys Ala Leu Gln Ser Gly Pro Pro Gln Ser
                565                570                575
Arg Arg Lys

```

<210> 349  
 <211> 207  
 <212> DNA  
 <213> Homo sapiens

```

<400> 349
atgtggcagc ccctcttctt caagtggctc ttgtcctgtt gccctgggag ttctcaaatt 60
gctgcagcag cctccacca gcctgaggat gacatcaata cacagaggaa gaagagtcag 120
gaaaagatga gagaagttac agactctcct gggcgacccc gagagcttac cattcctcag 180
acttcttcac atggtgctaa cagattt                                     207

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<210> 350  
 <211> 69  
 <212> PRT  
 <213> Homo sapiens

```

<400> 350
Met Trp Gln Pro Leu Phe Phe Lys Trp Leu Leu Ser Cys Cys Pro Gly
1          5          10          15
Ser Ser Gln Ile Ala Ala Ala Ala Ser Thr Gln Pro Glu Asp Asp Ile
20          25          30
Asn Thr Gln Arg Lys Lys Ser Gln Glu Lys Met Arg Glu Val Thr Asp
35          40          45
Ser Pro Gly Arg Pro Arg Glu Leu Thr Ile Pro Gln Thr Ser Ser His
50          55          60
Gly Ala Asn Arg Phe
65

```

<210> 351  
 <211> 1012  
 <212> DNA  
 <213> Homo sapiens

<400> 351  
 ccctctagaa ataattttgt ttaactttta gaaggagata tacatatgca tcaccatcac 60  
 catcacacgg ccgcgtccga taacttccag ctgtcccagg gtgggcaggg attcgccatt 120  
 ccgatcgggc aggcgatggc gatcgcgggc cagatcaagc tccccaccgt tcatatcggg 180  
 cctaccgcct tcctcggtt ggggtgtgtc gacaacaacg gcaacggcgc acgagtccaa 240  
 cgcggtggtc ggagcgctcc ggcggcaagt ctcggcatct ccaccggcga cgtgatcacc 300  
 gcggtcgacg gcgtccgat caactcggcc accgcgatgg cggacgcgct taacgggcat 360  
 catcccggtg acgtcatctc ggtgacctgg caaaccaagt cgggcggcac gcgtacaggg 420  
 aacgtgacat tggccgaggg acccccggcc gaattcatgg attgggggac gctgcacact 480  
 ttcatacggg gtgtcaacaa aactccacc agcatcggga aggtgtggat cacagtcac 540  
 tttattttcc gagtcatgat cctcgtggtg gctgcccagg aagtgtgggg tgacgagcaa 600  
 gaggacttcg tctgcaacac actgcaaccg ggtgcaaaa atgtgtgcta tgaccacttt 660  
 tccccggtgt cccacatccg gctgtgggccc ctccagctga tcttcgtctc caccacagcg 720  
 ctgctggtgg ccatgcatgt ggcctactac aggcacgaaa ccaactcgcaa gttcaggcga 780  
 ggagagaaga ggaatgattt caaagacata gaggacatta aaaagcagaa ggttcggata 840  
 gaggggtgac tcgagcacca ccaccaccac cactgagatc cggctgctaa caaagcccga 900  
 aaggaagctg agttggctgc tgccaccgct gagcaataac tagcataacc ctttggggcc 960  
 tctaaacggg tcttgagggg ttttttgctg aaaggaggaa ctatatccgg at 1012

<210> 352  
 <211> 267  
 <212> PRT  
 <213> Homo sapiens

<400> 352  
 Met His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu  
 1 5 10 15  
 Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala  
 20 25 30  
 Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala  
 35 40 45  
 Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val  
 50 55 60  
 Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr  
 65 70 75 80  
 Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr  
 85 90 95  
 Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser  
 100 105 110  
 Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr  
 115 120 125  
 Leu Ala Glu Gly Pro Pro Ala Glu Phe Met Asp Trp Gly Thr Leu His  
 130 135 140  
 Thr Phe Ile Gly Gly Val Asn Lys His Ser Thr Ser Ile Gly Lys Val  
 145 150 155 160  
 Trp Ile Thr Val Ile Phe Ile Phe Arg Val Met Ile Leu Val Val Ala  
 165 170 175  
 Ala Gln Glu Val Trp Gly Asp Glu Gln Glu Asp Phe Val Cys Asn Thr  
 180 185 190

Leu Gln Pro Gly Cys Lys Asn Val Cys Tyr Asp His Phe Phe Pro Val  
           195                          200                          205  
 Ser His Ile Arg Leu Trp Ala Leu Gln Leu Ile Phe Val Ser Thr Pro  
           210                          215                          220  
 Ala Leu Leu Val Ala Met His Val Ala Tyr Tyr Arg His Glu Thr Thr  
   225                          230                          235                          240  
 Arg Lys Phe Arg Arg Gly Glu Lys Arg Asn Asp Phe Lys Asp Ile Glu  
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 Asp Ile Lys Lys Gln Lys Val Arg Ile Glu Gly  
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<210> 353  
 <211> 900  
 <212> DNA  
 <213> Homo sapiens

<400> 353  
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 accgttcata tcgggcctac cgccttcctc ggcttgggtg ttgtcgacaa caacggcaac 180  
 ggcgcacgag tccaacgcgt ggtcgggagc gctccggcgg caagtctcgg catctccacc 240  
 ggcgacgtga tcaccgcggt cgacggcgct ccgatcaact cggccaccgc gatggcggac 300  
 gcgcttaacg ggcattcatcc cggtgacgtc atctcggtga cctggcaaac caagtcgggc 360  
 ggcacgcgta cagggaacgt gacattggcc gagggacccc cggccgaatt ccacgaaacc 420  
 actcgcaagt tcaggcgagg agagaagagg aatgatttca aagacataga ggacattaaa 480  
 aagcagaagg ttcggataga ggggtcgctg tgggtggacgt acaccagcag catctttttc 540  
 cgaatcatct ttgaagcagc ctttatgtat gtgttttact tcctttacaa tgggtaccac 600  
 ctgccctggg tgttgaaatg tgggattgac ccctgcccc aacctgttga ctgctttatt 660  
 tctaggccaa cagagaagac cgtgtttacc atttttatga tttctgcgtc tgtgatttgc 720  
 atgctgctta acgtggcaga gttgtgctac ctgctgctga aagtgtgttt taggagatca 780  
 aagagagcac agacgcaaaa aaatcacccc aatcatgcc taaaggagag taagcagaat 840  
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<210> 354  
 <211> 299  
 <212> PRT  
 <213> Homo sapiens

<400> 354  
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           20                          25                          30  
 Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala  
           35                          40                          45  
 Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val  
   50                          55                          60  
 Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr  
   65                          70                          75                          80  
 Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr  
                           85                          90                          95  
 Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser

			100					105					110				
Val	Thr	Trp	Gln	Thr	Lys	Ser	Gly	Gly	Thr	Arg	Thr	Gly	Asn	Val	Thr		
		115					120					125					
Leu	Ala	Glu	Gly	Pro	Pro	Ala	Glu	Phe	His	Glu	Thr	Thr	Arg	Lys	Phe		
		130					135					140					
Arg	Arg	Gly	Glu	Lys	Arg	Asn	Asp	Phe	Lys	Asp	Ile	Glu	Asp	Ile	Lys		
145						150				155					160		
Lys	Gln	Lys	Val	Arg	Ile	Glu	Gly	Ser	Leu	Trp	Trp	Thr	Tyr	Thr	Ser		
			165					170						175			
Ser	Ile	Phe	Phe	Arg	Ile	Ile	Phe	Glu	Ala	Ala	Phe	Met	Tyr	Val	Phe		
		180					185						190				
Tyr	Phe	Leu	Tyr	Asn	Gly	Tyr	His	Leu	Pro	Trp	Val	Leu	Lys	Cys	Gly		
		195					200					205					
Ile	Asp	Pro	Cys	Pro	Asn	Leu	Val	Asp	Cys	Phe	Ile	Ser	Arg	Pro	Thr		
		210				215					220						
Glu	Lys	Thr	Val	Phe	Thr	Ile	Phe	Met	Ile	Ser	Ala	Ser	Val	Ile	Cys		
225					230				235						240		
Met	Leu	Leu	Asn	Val	Ala	Glu	Leu	Cys	Tyr	Leu	Leu	Leu	Lys	Val	Cys		
				245					250					255			
Phe	Arg	Arg	Ser	Lys	Arg	Ala	Gln	Thr	Gln	Lys	Asn	His	Pro	Asn	His		
			260				265					270					
Ala	Leu	Lys	Glu	Ser	Lys	Gln	Asn	Glu	Met	Asn	Glu	Leu	Ile	Ser	Asp		
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Ser	Gly	Gln	Asn	Ala	Ile	Thr	Gly	Phe	Pro	Ser							
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<210> 355  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> 355  
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24

<210> 356  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> 356  
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31

<210> 357  
 <211> 920  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 357

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Tyr	Asn	Gly	Leu	Leu	Ile	Ala	Ile	Asn	Pro	Gln	Val	Pro	Glu	Asn	Gln
			20					25					30		
Asn	Leu	Ile	Ser	Asn	Ile	Lys	Glu	Met	Ile	Thr	Glu	Ala	Ser	Phe	Tyr
			35				40					45			
Leu	Phe	Asn	Ala	Thr	Lys	Arg	Arg	Val	Phe	Phe	Arg	Asn	Ile	Lys	Ile
	50					55					60				
Leu	Ile	Pro	Ala	Thr	Trp	Lys	Ala	Asn	Asn	Asn	Ser	Lys	Ile	Lys	Gln
65					70					75					80
Glu	Ser	Tyr	Glu	Lys	Ala	Asn	Val	Ile	Val	Thr	Asp	Trp	Tyr	Gly	Ala
				85					90					95	
His	Gly	Asp	Asp	Pro	Tyr	Thr	Leu	Gln	Tyr	Arg	Gly	Cys	Gly	Lys	Glu
			100					105					110		
Gly	Lys	Tyr	Ile	His	Phe	Thr	Pro	Asn	Phe	Leu	Leu	Asn	Asp	Asn	Leu
			115				120					125			
Thr	Ala	Gly	Tyr	Gly	Ser	Arg	Gly	Arg	Val	Phe	Val	His	Glu	Trp	Ala
	130					135					140				
His	Leu	Arg	Trp	Gly	Val	Phe	Asp	Glu	Tyr	Asn	Asn	Asp	Lys	Pro	Phe
145					150					155					160
Tyr	Ile	Asn	Gly	Gln	Asn	Gln	Ile	Lys	Val	Thr	Arg	Cys	Ser	Ser	Asp
				165					170					175	
Ile	Thr	Gly	Ile	Phe	Val	Cys	Glu	Lys	Gly	Pro	Cys	Pro	Gln	Glu	Asn
			180					185					190		
Cys	Ile	Ile	Ser	Lys	Leu	Phe	Lys	Glu	Gly	Cys	Thr	Phe	Ile	Tyr	Asn
			195				200					205			
Ser	Thr	Gln	Asn	Ala	Thr	Ala	Ser	Ile	Met	Phe	Met	Gln	Ser	Leu	Ser
	210					215					220				
Ser	Val	Val	Glu	Phe	Cys	Asn	Ala	Ser	Thr	His	Asn	Gln	Glu	Ala	Pro
225					230					235					240
Asn	Leu	Gln	Asn	Gln	Met	Cys	Ser	Leu	Arg	Ser	Ala	Trp	Asp	Val	Ile
				245					250					255	
Thr	Asp	Ser	Ala	Asp	Phe	His	His	Ser	Phe	Pro	Met	Asn	Gly	Thr	Glu
			260					265					270		
Leu	Pro	Pro	Pro	Pro	Thr	Phe	Ser	Leu	Val	Glu	Ala	Gly	Asp	Lys	Val
			275				280					285			
Val	Cys	Leu	Val	Leu	Asp	Val	Ser	Ser	Lys	Met	Ala	Glu	Ala	Asp	Arg
	290					295					300				
Leu	Leu	Gln	Leu	Gln	Gln	Ala	Ala	Glu	Phe	Tyr	Leu	Met	Gln	Ile	Val
305					310					315					320
Glu	Ile	His	Thr	Phe	Val	Gly	Ile	Ala	Ser	Phe	Asp	Ser	Lys	Gly	Glu
				325					330					335	
Ile	Arg	Ala	Gln	Leu	His	Gln	Ile	Asn	Ser	Asn	Asp	Asp	Arg	Lys	Leu
			340					345					350		
Leu	Val	Ser	Tyr	Leu	Pro	Thr	Thr	Val	Ser	Ala	Lys	Thr	Asp	Ile	Ser
			355				360					365			
Ile	Cys	Ser	Gly	Leu	Lys	Lys	Gly	Phe	Glu	Val	Val	Glu	Lys	Leu	Asn
			370			375					380				
Gly	Lys	Ala	Tyr	Gly	Ser	Val	Met	Ile	Leu	Val	Thr	Ser	Gly	Asp	Asp
385					390					395					400
Lys	Leu	Leu	Gly	Asn	Cys	Leu	Pro	Thr	Val	Leu	Ser	Ser	Gly	Ser	Thr
				405					410					415	
Ile	His	Ser	Ile	Ala	Leu	Gly	Ser	Ser	Ala	Ala	Pro	Asn	Leu	Glu	Glu

			420					425				430			
Leu	Ser	Arg	Leu	Thr	Gly	Gly	Leu	Lys	Phe	Phe	Val	Pro	Asp	Ile	Ser
		435					440					445			
Asn	Ser	Asn	Ser	Met	Ile	Asp	Ala	Phe	Ser	Arg	Ile	Ser	Ser	Gly	Thr
	450					455					460				
Gly	Asp	Ile	Phe	Gln	Gln	His	Ile	Gln	Leu	Glu	Ser	Thr	Gly	Glu	Asn
465					470					475					480
Val	Lys	Pro	His	His	Gln	Leu	Lys	Asn	Thr	Val	Thr	Val	Asp	Asn	Thr
			485						490					495	
Val	Gly	Asn	Asp	Thr	Met	Phe	Leu	Val	Thr	Trp	Gln	Ala	Ser	Gly	Pro
		500						505					510		
Pro	Glu	Ile	Ile	Leu	Phe	Asp	Pro	Asp	Gly	Arg	Lys	Tyr	Tyr	Thr	Asn
	515						520					525			
Asn	Phe	Ile	Thr	Asn	Leu	Thr	Phe	Arg	Thr	Ala	Ser	Leu	Trp	Ile	Pro
	530					535					540				
Gly	Thr	Ala	Lys	Pro	Gly	His	Trp	Thr	Tyr	Thr	Leu	Asn	Asn	Thr	His
545					550					555					560
His	Ser	Leu	Gln	Ala	Leu	Lys	Val	Thr	Val	Thr	Ser	Arg	Ala	Ser	Asn
			565						570					575	
Ser	Ala	Val	Pro	Pro	Ala	Thr	Val	Glu	Ala	Phe	Val	Glu	Arg	Asp	Ser
		580						585				590			
Leu	His	Phe	Pro	His	Pro	Val	Met	Ile	Tyr	Ala	Asn	Val	Lys	Gln	Gly
	595					600					605				
Phe	Tyr	Pro	Ile	Leu	Asn	Ala	Thr	Val	Thr	Ala	Thr	Val	Glu	Pro	Glu
	610				615						620				
Thr	Gly	Asp	Pro	Val	Thr	Leu	Arg	Leu	Leu	Asp	Asp	Gly	Ala	Gly	Ala
625					630					635					640
Asp	Val	Ile	Lys	Asn	Asp	Gly	Ile	Tyr	Ser	Arg	Tyr	Phe	Phe	Ser	Phe
			645						650					655	
Ala	Ala	Asn	Gly	Arg	Tyr	Ser	Leu	Lys	Val	His	Val	Asn	His	Ser	Pro
		660						665				670			
Ser	Ile	Ser	Thr	Pro	Ala	His	Ser	Ile	Pro	Gly	Ser	His	Ala	Met	Tyr
	675						680					685			
Val	Pro	Gly	Tyr	Thr	Ala	Asn	Gly	Asn	Ile	Gln	Met	Asn	Ala	Pro	Arg
	690					695					700				
Lys	Ser	Val	Gly	Arg	Asn	Glu	Glu	Glu	Arg	Lys	Trp	Gly	Phe	Ser	Arg
705					710					715					720
Val	Ser	Ser	Gly	Gly	Ser	Phe	Ser	Val	Leu	Gly	Val	Pro	Ala	Gly	Pro
			725						730					735	
His	Pro	Asp	Val	Phe	Pro	Pro	Cys	Lys	Ile	Ile	Asp	Leu	Glu	Ala	Val
		740						745				750			
Lys	Val	Glu	Glu	Glu	Leu	Thr	Leu	Ser	Trp	Thr	Ala	Pro	Gly	Glu	Asp
	755						760					765			
Phe	Asp	Gln	Gly	Gln	Ala	Thr	Ser	Tyr	Glu	Ile	Arg	Met	Ser	Lys	Ser
	770					775					780				
Leu	Gln	Asn	Ile	Gln	Asp	Asp	Phe	Asn	Asn	Ala	Ile	Leu	Val	Asn	Thr
785					790					795					800
Ser	Lys	Arg	Asn	Pro	Gln	Gln	Ala	Gly	Ile	Arg	Glu	Ile	Phe	Thr	Phe
			805						810					815	
Ser	Pro	Gln	Ile	Ser	Thr	Asn	Gly	Pro	Glu	His	Gln	Pro	Asn	Gly	Glu
		820						825				830			
Thr	His	Glu	Ser	His	Arg	Ile	Tyr	Val	Ala	Ile	Arg	Ala	Met	Asp	Arg
	835						840					845			
Asn	Ser	Leu	Gln	Ser	Ala	Val	Ser	Asn	Ile	Ala	Gln	Ala	Pro	Leu	Phe

850	855	860
Ile Pro Pro Asn Ser Asp Pro Val Pro Ala Arg Asp Tyr Leu Ile Leu		
865	870	875
Lys Gly Val Leu Thr Ala Met Gly Leu Ile Gly Ile Ile Cys Leu Ile		880
	885	890
Ile Val Val Thr His His Thr Leu Ser Arg Lys Lys Arg Ala Asp Lys		895
	900	905
Lys Glu Asn Gly Thr Lys Leu Leu		910
	915	920

<210> 358  
 <211> 2773  
 <212> DNA  
 <213> Homo sapiens

<400> 358

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gaaatgataa	ctgaagcttc	attttaccta	tttaatgcta	ccaagagaag	agtatttttc	180
agaaatataa	agattttta	acctgccaca	tggaaagcta	ataataacag	caaaataaaa	240
caagaatcat	atgaaaaggc	aaatgtcata	gtgactgact	ggtatggggc	acatggagat	300
gatccatata	ccctacaata	cagaggggtg	ggaaaagagg	gaaaatacat	tcatttcaca	360
cctaatttcc	tactgaatga	taacttaaca	gctggctacg	gatcacgagg	ccgagtgttt	420
gtocatgaat	gggcccacct	ccgttggggg	gtgttcgatg	agtataacaa	tgacaaacct	480
ttctacataa	atgggcaaaa	tcaaattaaa	gtgacaaggt	gttcatctga	catcacaggc	540
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aaagaaggat	gcacctttat	ctacaatagc	acccaaaatg	caactgcatc	aataatgttc	660
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ccaaacctac	agaaccagat	gtgcagcctc	agaagtgcac	gggatgtaac	cacagactct	780
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cagctacacc	aaattaacag	caatgatgat	cgaaagttgc	tggtttcata	tctgcccacc	1080
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catcattctc	tgcaagccct	gaaagtgcac	gtgacctctc	gcgcctccaa	ctcagctgtg	1740
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atgaatgctc	caaggaaatc	agtaggcaga	aatgaggagg	agcgaaagtg	gggcttttagc	2160
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gtgtttccac catgcaaaat tattgacctg gaagctgtaa aagtagaaga ggaattgacc 2280
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agaatgagta aaagtctaca gaatatccaa gatgacttta acaatgctat tttagtaaata 2400
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ttgaaaggag ttttaacagc aatgggtttg ataggaatca tttgccttat tatagttgtg 2700
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<210> 359

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 359

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<210> 360

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 360

cgccagaatt catcaaaca atctgttagc acc 33

<210> 361

<211> 77

<212> PRT

<213> Homo sapiens

<400> 361

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Leu Leu Ser Cys Cys Pro Gly Ser Ser Gln Ile Ala Ala Ala Ala Ser
 20          25          30
Thr Gln Pro Glu Asp Asp Ile Asn Thr Gln Arg Lys Lys Ser Gln Glu
 35          40          45
Lys Met Arg Glu Val Thr Asp Ser Pro Gly Arg Pro Arg Glu Leu Thr
 50          55          60
Ile Pro Gln Thr Ser Ser His Gly Ala Asn Arg Phe Val
 65          70          75

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<210> 362

<211> 244

<212> DNA

<213> Homo sapiens

<400> 362

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aatacacaga ggaagaagag tcaggaaaag atgagagaag ttacagactc tcctgggcga 180
ccccgagagc ttaccattcc tcagacttct tcacatgggtg ctaacagatt tgtttgatga 240
attc 244
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<210> 363

<211> 20

<212> PRT

<213> Homo sapiens

<400> 363

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Met Trp Gln Pro Leu Phe Phe Lys Trp Leu Leu Ser Cys Cys Pro Gly
  1             5             10            15
Ser Ser Gln Ile
           20
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<210> 364

<211> 60

<212> DNA

<213> Homo sapiens

<400> 364

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<210> 365

<211> 20

<212> PRT

<213> Homo sapiens

<400> 365

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Gly Ser Ser Gln Ile Ala Ala Ala Ala Ser Thr Gln Pro Glu Asp Asp
  1             5             10            15
Ile Asn Thr Gln
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<210> 366

<211> 60

<212> DNA

<213> Homo sapiens

<400> 366

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<210> 367

<211> 20

<212> PRT

<213> Homo sapiens

<400> 367

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 1 5 10 15  
 Gln Ala Leu Lys  
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<210> 368

<211> 2343

<212> DNA

<213> Homo sapiens

<400> 368

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gcgccgcgccc tctgaggcgc agcatgtgaa gcggagacgg catccagtgg ggggcgagcc 180
tctcagccgg ccgggatggc taccacggcc gagctcttcg aggagccttt tgtggcagat 240
gaatatattg aacgtcttgt atggagaacc ccaggaggag gctctagagg tggacctgaa 300
gcttttgatc ctaaaagatt attagaagaa tttgtaaatc atattcagga actccagata 360
atggatgaaa ggattcagag gaaagtagag aaactagagc aacaatgtca gaaagaagcc 420
aaggaatttg ccaagaaggt acaagagctg cagaaaagca atcagggtgc cttccaacat 480
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2343

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Gly	Pro	Glu	Ala	Phe	Asp	Pro	Lys	Arg	Leu	Leu	Glu	Glu	Phe	Val	Asn
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His	Ile	Gln	Glu	Leu	Gln	Ile	Met	Asp	Glu	Arg	Ile	Gln	Arg	Lys	Val
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65					70					75					80
Lys	Val	Gln	Glu	Leu	Gln	Lys	Ser	Asn	Gln	Val	Ala	Phe	Gln	His	Phe
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Gln	Glu	Leu	Asp	Glu	His	Ile	Ser	Tyr	Val	Ala	Thr	Lys	Val	Cys	His
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Leu	Gly	Asp	Gln	Leu	Glu	Gly	Val	Asn	Thr	Pro	Arg	Gln	Arg	Ala	Val
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Glu	Ala	Gln	Lys	Leu	Met	Lys	Tyr	Phe	Asn	Glu	Phe	Leu	Asp	Gly	Glu
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Asp	Ile	Ile	Gln	Lys	Leu	His	Leu	Ile	Ala	Gln	Glu	Leu	Pro	Phe	Asp
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Arg	Phe	Ser	Glu	Val	Lys	Ser	Lys	Ile	Ala	Ser	Lys	Tyr	His	Asp	Leu
			180					185					190		
Glu	Cys	Gln	Leu	Ile	Gln	Glu	Phe	Thr	Ser	Ala	Gln	Arg	Arg	Gly	Glu
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Tyr	Ser	His	Cys	Val	Asp	Val	Tyr	Ile	Lys	Gln	Cys	Gln	Glu	Gly	Ala
225					230					235					240
Tyr	Leu	Arg	Asn	Asp	Ile	Phe	Glu	Asp	Ala	Gly	Ile	Leu	Cys	Gln	Arg
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Val	Asn	Lys	Gln	Val	Gly	Asp	Ile	Phe	Ser	Asn	Pro	Glu	Thr	Val	Leu
			260					265					270		
Ala	Lys	Leu	Ile	Gln	Asn	Val	Phe	Glu	Ile	Lys	Leu	Gln	Ser	Phe	Val
		275					280					285			
Lys	Glu	Gln	Leu	Glu	Glu	Cys	Arg	Lys	Ser	Asp	Ala	Glu	Gln	Tyr	Leu
	290					295					300				
Lys	Asn	Leu	Tyr	Asp	Leu	Tyr	Thr	Arg	Thr	Thr	Asn	Leu	Ser	Ser	Lys
305					310					315					320
Leu	Met	Glu	Phe	Asn	Leu	Gly	Thr	Asp	Lys	Gln	Thr	Phe	Leu	Ser	Lys
			325						330					335	
Leu	Ile	Lys	Ser	Ile	Phe	Ile	Ser	Tyr	Leu	Glu	Asn	Tyr	Ile	Glu	Val
			340					345					350		
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Pro Ser Ile Asp Thr His Gly Glu Thr Phe Leu Ser Gln Glu Val Val
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Val Asn Leu Leu Gln Glu Thr Lys Gln Ala Phe Glu Arg Cys His Arg
                      420                      425                      430
Leu Ser Asp Pro Ser Asp Leu Pro Arg Asn Ala Phe Arg Ile Phe Thr
  435                      440                      445
Ile Leu Val Glu Phe Leu Cys Ile Glu His Ile Asp Tyr Ala Leu Glu
  450                      455                      460
Thr Gly Leu Ala Gly Ile Pro Ser Ser Asp Ser Arg Asn Ala Asn Leu
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Tyr Phe Leu Asp Val Val Gln Gln Ala Asn Thr Ile Phe His Leu Phe
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Asp Lys Gln Phe Asn Asp His Leu Met Pro Leu Ile Ser Ser Ser Pro
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Lys Leu Ser Glu Cys Leu Gln Lys Lys Lys Glu Ile Ile Glu Gln Met
  515                      520                      525
Glu Met Lys Leu Asp Thr Gly Ile Asp Arg Thr Leu Asn Cys Met Ile
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Gly Gln Met Lys His Ile Leu Ala Ala Glu Gln Lys Lys Thr Asp Phe
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Lys Pro Glu Asp Glu Asn Asn Val Leu Ile Gln Tyr Thr Asn Ala Cys
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Val Lys Val Cys Ala Tyr Val Arg Lys Gln Val Glu Lys Ile Lys Asn
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Ser Met Asp Gly Lys Asn Val Asp Thr Val Leu Met Glu Leu Gly Val
  595                      600                      605
Arg Phe His Arg Leu Ile Tyr Glu His Leu Gln Gln Tyr Ser Tyr Ser
  610                      615                      620
Cys Met Gly Gly Met Leu Ala Ile Cys Asp Val Ala Glu Tyr Arg Lys
625                      630                      635                      640
Cys Ala Lys Asp Phe Lys Ile Pro Met Val Leu His Leu Phe Asp Thr
                      645                      650                      655
Leu His Ala Leu Cys Asn Leu Leu Val Val Ala Pro Asp Asn Leu Lys
  660                      665                      670
Gln Val Cys Ser Gly Glu Gln Leu Ala Asn Leu Asp Lys Asn Ile Leu
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His Ser Phe Val Gln Leu Arg Ala Asp Tyr Arg Ser Ala Arg Leu Ala
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&lt;400&gt; 370

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Ser His Ala Met  
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 Pro Glu Asp

<210> 389  
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<400> 389  
 Ala Ala Ala Ala Ser Thr Gln Pro Glu Asp Asp Ile Asn Thr Gln Arg  
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 Lys Lys Ser Gln  
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<210> 390  
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Thr Gln Pro Glu Asp Asp Ile Asn Thr Gln Arg Lys Lys Ser Gln Glu  
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 Lys Met Arg Glu  
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<210> 399  
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<210> 402  
 <211> 20  
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<210> 405  
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<400> 408

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<210> 409  
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 ccgagagctt accattcctc agacttcttc acatgggtgct aacagatttg ttcctaaaag 360  
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<220>

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<400> 422

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Gly	Asp	Tyr	Tyr	Thr	Leu	Ala	Val	Pro	Met	Gly	Asp	Val	Pro	Met	Asp
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Gly	Ile	Ser	Val	Ala	Asp	Ile	Gly	Ala	Ala	Val	Ser	Ser	Ile	Phe	Asn
		50				55					60				
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Leu	Thr	Ile	Gln	Gln	Tyr	Ala	Asp	Val	Leu	Ser	Lys	Ala	Leu	Gly	Lys
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Glu	Val	Arg	Asp	Ala	Lys	Ile	Thr	Pro	Glu	Ala	Phe	Glu	Lys	Leu	Gly
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<212> DNA

<213> Homo sapiens

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33

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<213> Homo sapiens

<400> 427

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Lys	Ile	Pro	Val	Ser	Gly	Pro	Phe	Leu	Val	Lys	Thr	Gly	Tyr	Ala	Phe
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Ser	Gly	Lys	Ile	Glu	Leu	His	Gly	Lys	Pro	Ile	Glu	Val	Glu	His	Ser
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															325			330			335								
Lys	Gly	Asn	Val	Glu	Thr	Cys	Ala	Lys	Ala	Glu	Glu	Glu	Ile	Met	Lys														
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															370			375			380								
Pro	Thr	Ser	Gly	Met	Pro	Pro	Pro	Thr	Ser	Gly	Pro	Pro	Ser	Ala	Met														
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															485			490			495								
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															515			520			525								
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 <213> Homo sapiens

<400> 428

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			340					345					350		
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		355					360					365			
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385					390					395					400
Lys	Leu	Leu	Gly	Asn	Cys	Leu	Pro	Thr	Val	Leu	Ser	Ser	Gly	Ser	Thr
			405						410					415	
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Leu	His	Phe	Pro	His	Pro	Val	Met	Ile	Tyr	Ala	Asn	Val	Lys	Gln	Gly
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Phe	Tyr	Pro	Ile	Leu	Asn	Ala	Thr	Val	Thr	Ala	Thr	Val	Glu	Pro	Glu
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Asp	Val	Ile	Lys	Asn	Asp	Gly	Ile	Tyr	Ser	Arg	Tyr	Phe	Phe	Ser	Phe
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Thr	His	Glu	Ser	His	Arg	Ile	Tyr	Val	Ala	Ile	Arg	Ala	Met	Asp	Arg
835							840					845			
Asn	Ser	Leu	Gln	Ser	Ala	Val	Ser	Asn	Ile	Ala	Gln	Ala	Pro	Leu	Phe

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<223> PCR primer

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36

<210> 433

<211> 371

<212> PRT

<213> Homo sapiens

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Met Gln His His His His His His Trp Gln Pro Leu Phe Phe Lys Trp
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Leu Leu Ser Cys Cys Pro Gly Ser Ser Gln Ile Ala Ala Ala Ala Ser
          20          25          30
Thr Gln Pro Glu Asp Asp Ile Asn Thr Gln Arg Lys Lys Ser Gln Glu
          35          40          45
Lys Met Arg Glu Val Thr Asp Ser Pro Gly Arg Pro Arg Glu Leu Thr
          50          55          60
Ile Pro Gln Thr Ser Ser His Gly Ala Asn Arg Phe Val Pro Lys Ser
65          70          75          80
Lys Ala Leu Glu Ala Val Lys Leu Ala Ile Glu Ala Gly Phe His His
          85          90          95
Ile Asp Ser Ala His Val Tyr Asn Asn Glu Glu Gln Val Gly Leu Ala
          100          105          110
Ile Arg Ser Lys Ile Ala Asp Gly Ser Val Lys Arg Glu Asp Ile Phe
          115          120          125
Tyr Thr Ser Lys Leu Trp Ser Asn Ser His Arg Pro Glu Leu Val Arg
          130          135          140
Pro Ala Leu Glu Arg Ser Leu Lys Asn Leu Gln Leu Asp Tyr Val Asp
145          150          155          160
Leu Tyr Leu Ile His Phe Pro Val Ser Val Lys Pro Gly Glu Glu Val
          165          170          175
Ile Pro Lys Asp Glu Asn Gly Lys Ile Leu Phe Asp Thr Val Asp Leu
          180          185          190
Cys Ala Thr Trp Glu Ala Met Glu Lys Cys Lys Asp Ala Gly Leu Ala
          195          200          205
Lys Ser Ile Gly Val Ser Asn Phe Asn His Arg Leu Leu Glu Met Ile
          210          215          220
Leu Asn Lys Pro Gly Leu Lys Tyr Lys Pro Val Cys Asn Gln Val Glu
225          230          235          240
Cys His Pro Tyr Phe Asn Gln Arg Lys Leu Leu Asp Phe Cys Lys Ser
          245          250          255

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Lys Asp Ile Val Leu Val Ala Tyr Ser Ala Leu Gly Ser His Arg Glu  
                   260                                  265                                  270  
 Glu Pro Trp Val Asp Pro Asn Ser Pro Val Leu Leu Glu Asp Pro Val  
                   275                                  280                                  285  
 Leu Cys Ala Leu Ala Lys Lys His Lys Arg Thr Pro Ala Leu Ile Ala  
                   290                                  295                                  300  
 Leu Arg Tyr Gln Leu Gln Arg Gly Val Val Val Leu Ala Lys Ser Tyr  
 305                                  310                                  315                                  320  
 Asn Glu Gln Arg Ile Arg Gln Asn Val Gln Val Phe Glu Phe Gln Leu  
                                   325                                  330                                  335  
 Thr Ser Glu Glu Met Lys Ala Ile Asp Gly Leu Asn Arg Asn Val Arg  
                                   340                                  345                                  350  
 Tyr Leu Thr Leu Asp Ile Phe Ala Gly Pro Pro Asn Tyr Pro Phe Ser  
                   355                                  360                                  365  
 Asp Glu Tyr  
                   370

<210> 434  
 <211> 1119  
 <212> DNA  
 <213> Homo sapiens

<400> 434  
 atgcagcatc accaccatca ccaactggcag cccctcttct tcaagtggct cttgtcctgt . 60  
 tgccctggga gttctcaaat tgctgcagca gcctccaccc agcctgagga tgacatcaat 120  
 acacagagga agaagagtca ggaaaagatg agagaagtta cagactctcc tgggcgaccc 180  
 cgagagctta ccattcctca gacttcttca catgggtgcta acagatttgt tcctaaaagt 240  
 aaagctctag aggccgtcaa attggcaata gaagccgggt tccaccatat tgattctgca 300  
 catgtttaca ataatgagga gcaggttgga ctggccatcc gaagcaagat tgcagatggc 360  
 agtgtgaaga gagaagacat attctacact tcaaagcttt ggagcaattc ccatcgacca 420  
 gagttggctc gaccagcctt ggaaaggcca ctgaaaaatc ttcaattgga ctatgttgac 480  
 ctctatctta ttcattttcc agtgtctgta aagccagggt aggaagtgat cccaaaagat 540  
 gaaaatggaa aaatactatt tgacacagtg gatctctgtg ccacatggga ggccatggag 600  
 aagtgtaaag atgcaggatt ggccaagtcc atcgggggtg ccaacttcaa ccacaggctg 660  
 ctggagatga tcctcaacaa gccagggctc aagtacaagc ctgtctgcaa ccagggtgaa 720  
 tgtcatcctt acttcaacca gagaaaactg ctggatttct gcaagtcaaa agacattggt 780  
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 gccctgattg ccctgcgcta ccagctgcag cgtgggggtg tggtcctggc caagagctac 960  
 aatgagcagc gcatcagaca gaacgtgcag gtgtttgaat tccagttgac ttcagaggag 1020  
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 ggcccccta attatccatt ttctgatgaa tattaatga 1119

<210> 435  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Primer

<400> 435  
 ggatccgccg ccaccatgac atccattcga gctgta

<210> 436  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Primer

<400> 436  
 gtcgactcag ctggaccaca gccgcag 27

<210> 437  
 <211> 37  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Primer

<400> 437  
 ggatccgccg ccaccatgga ctcttgacc ttctgct 37

<210> 438  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Primer

<400> 438  
 gtcgactcag aaatcctttc tcttgac 27

<210> 439  
 <211> 933  
 <212> DNA  
 <213> Homo sapiens

<400> 439  
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 agatgtaaac caatttcagg acacgactac cttttctggt acagacagac catgatgcgg 180  
 ggactggagt tgctcattta cttaacaac aacgttccga tagatgattc agggatgccc 240  
 gaggatcgat tctcagctaa gatgcctaata gcatcattct ccaactctgaa gatccagccc 300  
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 gaagctttct ttggacaagg caccagactc acagttgtag aggacctgaa caaggtgttc 420  
 ccaccgagg tcgctgtgtt tgagccatca gaagcagaga tctccacac ccaaaaggcc 480  
 aactgggtgt gcctggccac aggcttcttc cctgaccacg tggagctgag ctggtgggtg 540  
 aatgggaagg aggtgcacag tggggtcagc acggaccgc agccctcaa ggagcagccc 600  
 gccctcaatg actccagata ctgcctgagc agccgcctga gggctctggc caccttctgg 660  
 cagaaccccc gcaaccactt ccgctgtcaa gtccagttct acgggctctc ggagaatgac 720  
 gagtggaccc aggatagggc caaaccgcgt acccagatcg tcagcgccga ggccctgggt 780  
 agagcagact gtggctttac ctgcgtgtcc taccagcaag gggctctgtc tgccaccatc 840

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<210> 440  
 <211> 822  
 <212> DNA  
 <213> Homo sapiens

<400> 440						
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aagtgtactt	attcagacag	tgccctaaac	tacttccctt	ggtataagca	agaacttgga	180
aaaagacctc	agcttattat	agacattcgt	tcaaattgtg	gcaaaaagaa	agaccaacga	240
attgctgtta	cattgaacaa	gacagccaaa	catttctccc	tgacatcac	agagacccaa	300
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tattttggga	cagggacaag	tttgacggtc	attccaaata	tccagaacct	tgaccctgcc	420
gtgtaccagc	tgagagactc	taaatccagt	gacaagtctg	tctgcctatt	caccgatttt	480
gattctcaaa	caaattgtgtc	acaaagtaag	gattctgatg	tgtatatcac	agacaaaact	540
gtgctagaca	tgaggtctat	ggacttcaag	agcaacagt	ctgtggcctg	gagcaacaaa	600
tctgactttg	catgtgcaaa	cgccctcaac	aacagcatta	ttccagaaga	caccttcttc	660
cccagcccag	aaagttcctg	tgatgtcaag	ctgggtcgaga	aaagctttga	aacagatacg	720
aacctaaact	ttcaaaacct	gtcagtgatt	gggttccgaa	tcctcctcct	gaaagtggcc	780
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<210> 441  
 <211> 2311  
 <212> DNA  
 <213> Homo sapiens

<400> 441						
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aaccgcccag	agtagaagat	ggattggggc	acgctgcaga	cgatccctgg	gggtgtgaac	240
aaacactcca	ccagcattgg	aaagatctgg	ctcaccgtcc	tcttcatttt	tcgcattatg	300
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taagaaatag	acagcatgag	agggatgagg	caaccctg	tcagctgtca	aggctcagtc	960
gccagcattt	cccaacacaa	agattctgac	cttaaatgca	accatttgaa	accctgtag	1020
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tctttcattt	gctttggaag	ttttaatctc	taacagtgg	caaagttacc	agtgccttaa	1380

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atggtatgtc attcgctact atgatttaat ttgaaatatg gtcttttggg tatgaatact 1560
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tgaacctgaa tattgccatt atgcttgaca tggtttccaa aaaatggtac tccacatact 2160
tcagtgaggg taagtatttt cctgttgta agaatagcat tgtaaaagca ttttgaata 2220
ataaagaata gctttaatga tatgcttgta actaaaataa ttttgtaatg tatcaaatac 2280
atttaaaaca ttaaaatata atctctataa t 2311

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<210> 442  
 <211> 226  
 <212> PRT  
 <213> Homo sapiens

<400> 442  
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 Ser Thr Ser Ile Gly Lys Ile Trp Leu Thr Val Leu Phe Ile Phe Arg  
                     20                    25                    30  
 Ile Met Ile Leu Val Val Ala Ala Lys Glu Val Trp Gly Asp Glu Gln  
                     35                    40                    45  
 Ala Asp Phe Val Cys Asn Thr Leu Gln Pro Gly Cys Lys Asn Val Cys  
                     50                    55                    60  
 Tyr Asp His Tyr Phe Pro Ile Ser His Ile Arg Leu Trp Ala Leu Gln  
                     65                    70                    75                    80  
 Leu Ile Phe Val Ser Ser Pro Ala Leu Leu Val Ala Met His Val Ala  
                     85                    90                    95  
 Tyr Arg Arg His Glu Lys Lys Arg Lys Phe Ile Lys Gly Glu Ile Lys  
                     100                    105                    110  
 Ser Glu Phe Lys Asp Ile Glu Glu Ile Lys Thr Gln Lys Val Arg Ile  
                     115                    120                    125  
 Glu Gly Ser Leu Trp Trp Thr Tyr Thr Ser Ser Ile Phe Phe Arg Val  
                     130                    135                    140  
 Ile Phe Glu Ala Ala Phe Met Tyr Val Phe Tyr Val Met Tyr Asp Gly  
                     145                    150                    155                    160  
 Phe Ser Met Gln Arg Leu Val Lys Cys Asn Ala Trp Pro Cys Pro Asn

165 170 175  
 Thr Val Asp Cys Phe Val Ser Arg Pro Thr Glu Lys Thr Val Phe Thr  
 180 185 190  
 Val Phe Met Ile Ala Val Ser Gly Ile Cys Ile Leu Leu Asn Val Thr  
 195 200 205  
 Glu Leu Cys Tyr Leu Leu Ile Arg Tyr Cys Ser Gly Lys Ser Lys Lys  
 210 215 220  
 Pro Val  
 225

<210> 443  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 443  
 Val Lys Leu Cys Gly Ile Asp Pro Cys Pro Asn Leu Val Asp Cys Phe  
 5 10 15

Ile Ser Arg Pro Gly Cys Gly  
 20

<210> 444  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> 444  
 caatcaggca tgcacaacaa actgtatatc ggaaac

36

<210> 445  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> 445  
 cgtcaagatc ttcattactt ccgtcttgac

30

<210> 446  
 <211> 579

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 446

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Met Asn Lys Leu Tyr Ile Gly Asn Leu Ser Glu Asn Ala Ala Pro Ser
      5                      10                      15

Asp Leu Glu Ser Ile Phe Lys Asp Ala Lys Ile Pro Val Ser Gly Pro
      20                      25                      30

Phe Leu Val Lys Thr Gly Tyr Ala Phe Val Asp Cys Pro Asp Glu Ser
      35                      40                      45

Trp Ala Leu Lys Ala Ile Glu Ala Leu Ser Gly Lys Ile Glu Leu His
      50                      55                      60

Gly Lys Pro Ile Glu Val Glu His Ser Val Pro Lys Arg Gln Arg Ile
      65                      70                      75                      80

Arg Lys Leu Gln Ile Arg Asn Ile Pro Pro His Leu Gln Trp Glu Val
      85                      90                      95

Leu Asp Ser Leu Leu Val Gln Tyr Gly Val Val Glu Ser Cys Glu Gln
      100                     105                     110

Val Asn Thr Asp Ser Glu Thr Ala Val Val Asn Val Thr Tyr Ser Ser
      115                     120                     125

Lys Asp Gln Ala Arg Gln Ala Leu Asp Lys Leu Asn Gly Phe Gln Leu
      130                     135                     140

Glu Asn Phe Thr Leu Lys Val Ala Tyr Ile Pro Asp Glu Thr Ala Ala
      145                     150                     155                     160

Gln Gln Asn Pro Leu Gln Gln Pro Arg Gly Arg Arg Gly Leu Gly Gln
      165                     170                     175

Arg Gly Ser Ser Arg Gln Gly Ser Pro Gly Ser Val Ser Lys Gln Lys
      180                     185                     190

Pro Cys Asp Leu Pro Leu Arg Leu Leu Val Pro Thr Gln Phe Val Gly
      195                     200                     205

Ala Ile Ile Gly Lys Glu Gly Ala Thr Ile Arg Asn Ile Thr Lys Gln
      210                     215                     220

Thr Gln Ser Lys Ile Asp Val His Arg Lys Glu Asn Ala Gly Ala Ala
      225                     230                     235                     240
Glu Lys Ser Ile Thr Ile Leu Ser Thr Pro Glu Gly Thr Ser Ala Ala
      245                     250                     255

Cys Lys Ser Ile Leu Glu Ile Met His Lys Glu Ala Gln Asp Ile Lys
      260                     265                     270

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Phe	Thr	Glu	Glu	Ile	Pro	Leu	Lys	Ile	Leu	Ala	His	Asn	Asn	Phe	Val
		275					280					285			
Gly	Arg	Leu	Ile	Gly	Lys	Glu	Gly	Arg	Asn	Leu	Lys	Lys	Ile	Glu	Gln
	290					295					300				
Asp	Thr	Asp	Thr	Lys	Ile	Thr	Ile	Ser	Pro	Leu	Gln	Glu	Leu	Thr	Leu
305					310					315					320
Tyr	Asn	Pro	Glu	Arg	Thr	Ile	Thr	Val	Lys	Gly	Asn	Val	Glu	Thr	Cys
				325					330					335	
Ala	Lys	Ala	Glu	Glu	Glu	Ile	Met	Lys	Lys	Ile	Arg	Glu	Ser	Tyr	Glu
			340					345					350		
Asn	Asp	Ile	Ala	Ser	Met	Asn	Leu	Gln	Ala	His	Leu	Ile	Pro	Gly	Leu
		355					360					365			
Asn	Leu	Asn	Ala	Leu	Gly	Leu	Phe	Pro	Pro	Thr	Ser	Gly	Met	Pro	Pro
	370					375					380				
Pro	Thr	Ser	Gly	Pro	Pro	Ser	Ala	Met	Thr	Pro	Pro	Tyr	Pro	Gln	Phe
385					390					395					400
Glu	Gln	Ser	Glu	Thr	Glu	Thr	Val	His	Leu	Phe	Ile	Pro	Ala	Leu	Ser
				405					410					415	
Val	Gly	Ala	Ile	Ile	Gly	Lys	Gln	Gly	Gln	His	Ile	Lys	Gln	Leu	Ser
			420					425					430		
Arg	Phe	Ala	Gly	Ala	Ser	Ile	Lys	Ile	Ala	Pro	Ala	Glu	Ala	Pro	Asp
		435					440					445			
Ala	Lys	Val	Arg	Met	Val	Ile	Ile	Thr	Gly	Pro	Pro	Glu	Ala	Gln	Phe
	450					455					460				
Lys	Ala	Gln	Gly	Arg	Ile	Tyr	Gly	Lys	Ile	Lys	Glu	Glu	Asn	Phe	Val
465					470					475					480
Ser	Pro	Lys	Glu	Glu	Val	Lys	Leu	Glu	Ala	His	Ile	Arg	Val	Pro	Ser
				485					490					495	
Phe	Ala	Ala	Gly	Arg	Val	Ile	Gly	Lys	Gly	Gly	Lys	Thr	Val	Asn	Glu
			500					505					510		
Leu	Gln	Asn	Leu	Ser	Ser	Ala	Glu	Val	Val	Val	Pro	Arg	Asp	Gln	Thr
		515					520					525			
Pro	Asp	Glu	Asn	Asp	Gln	Val	Val	Val	Lys	Ile	Thr	Gly	His	Phe	Tyr
	530					535					540				
Ala	Cys	Gln	Val	Ala	Gln	Arg	Lys	Ile	Gln	Glu	Ile	Leu	Thr	Gln	Val
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 565 570 575

Arg Arg Lys

<210> 447  
 <211> 1743  
 <212> DNA  
 <213> Homo sapiens

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 gagaagtcga ttactatcct ctctactcct gaaggcacct ctgcggcttg taagtctatt 780  
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 gggatgccac ctcccacctc agggccccct tcagccatga ctctcccta cccgcagttt 1200  
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<210> 448  
 <211> 35  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> PCR primer

<400> 448

cgtactagca tatgaacaaa ctgtatatcg gaaac

35

<210> 449  
 <211> 579  
 <212> PRT  
 <213> Homo sapiens

<400> 449

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Asp	Leu	Glu	Ser	Ile	Phe	Lys	Asp	Ala	Lys	Ile	Pro	Val	Ser	Gly	Pro
			20					25					30		
Phe	Leu	Val	Lys	Thr	Gly	Tyr	Ala	Phe	Val	Asp	Cys	Pro	Asp	Glu	Ser
		35					40					45			
Trp	Ala	Leu	Lys	Ala	Ile	Glu	Ala	Leu	Ser	Gly	Lys	Ile	Glu	Leu	His
	50					55					60				
Gly	Lys	Pro	Ile	Glu	Val	Glu	His	Ser	Val	Pro	Lys	Arg	Gln	Arg	Ile
	65				70					75					80
Arg	Lys	Leu	Gln	Ile	Arg	Asn	Ile	Pro	Pro	His	Leu	Gln	Trp	Glu	Val
			85						90					95	
Leu	Asp	Ser	Leu	Leu	Val	Gln	Tyr	Gly	Val	Val	Glu	Ser	Cys	Glu	Gln
		100						105					110		
Val	Asn	Thr	Asp	Ser	Glu	Thr	Ala	Val	Val	Asn	Val	Thr	Tyr	Ser	Ser
		115					120					125			
Lys	Asp	Gln	Ala	Arg	Gln	Ala	Leu	Asp	Lys	Leu	Asn	Gly	Phe	Gln	Leu
	130					135					140				
Glu	Asn	Phe	Thr	Leu	Lys	Val	Ala	Tyr	Ile	Pro	Asp	Glu	Thr	Ala	Ala
	145				150					155					160
Gln	Gln	Asn	Pro	Leu	Gln	Gln	Pro	Arg	Gly	Arg	Arg	Gly	Leu	Gly	Gln
			165						170					175	
Arg	Gly	Ser	Ser	Arg	Gln	Gly	Ser	Pro	Gly	Ser	Val	Ser	Lys	Gln	Lys
		180						185					190		
Pro	Cys	Asp	Leu	Pro	Leu	Arg	Leu	Leu	Val	Pro	Thr	Gln	Phe	Val	Gly
		195					200					205			
Ala	Ile	Ile	Gly	Lys	Glu	Gly	Ala	Thr	Ile	Arg	Asn	Ile	Thr	Lys	Gln
	210					215					220				
Thr	Gln	Ser	Lys	Ile	Asp	Val	His	Arg	Lys	Glu	Asn	Ala	Gly	Ala	Ala
	225				230					235					240
Glu	Lys	Ser	Ile	Thr	Ile	Leu	Ser	Thr	Pro	Glu	Gly	Thr	Ser	Ala	Ala

	245		250		255
Cys Lys Ser Ile Leu Glu Ile Met His Lys Glu Ala Gln Asp Ile Lys	260	265	270		
Phe Thr Glu Glu Ile Pro Leu Lys Ile Leu Ala His Asn Asn Phe Val	275	280	285		
Gly Arg Leu Ile Gly Lys Glu Gly Arg Asn Leu Lys Lys Ile Glu Gln	290	295	300		
Asp Thr Asp Thr Lys Ile Thr Ile Ser Pro Leu Gln Glu Leu Thr Leu	305	310	315		320
Tyr Asn Pro Glu Arg Thr Ile Thr Val Lys Gly Asn Val Glu Thr Cys	325	330			335
Ala Lys Ala Glu Glu Glu Ile Met Lys Lys Ile Arg Glu Ser Tyr Glu	340	345		350	
Asn Asp Ile Ala Ser Met Asn Leu Gln Ala His Leu Ile Pro Gly Leu	355	360		365	
Asn Leu Asn Ala Leu Gly Leu Phe Pro Pro Thr Ser Gly Met Pro Pro	370	375		380	
Pro Thr Ser Gly Pro Pro Ser Ala Met Thr Pro Pro Tyr Pro Gln Phe	385	390		395	400
Glu Gln Ser Glu Thr Glu Thr Val His Leu Phe Ile Pro Ala Leu Ser	405	410			415
Val Gly Ala Ile Ile Gly Lys Gln Gly Gln His Ile Lys Gln Leu Ser	420	425		430	
Arg Phe Ala Gly Ala Ser Ile Lys Ile Ala Pro Ala Glu Ala Pro Asp	435	440		445	
Ala Lys Val Arg Met Val Ile Ile Thr Gly Pro Pro Glu Ala Gln Phe	450	455		460	
Lys Ala Gln Gly Arg Ile Tyr Gly Lys Ile Lys Glu Glu Asn Phe Val	465	470		475	480
Ser Pro Lys Glu Glu Val Lys Leu Glu Ala His Ile Arg Val Pro Ser	485	490			495
Phe Ala Ala Gly Arg Val Ile Gly Lys Gly Gly Lys Thr Val Asn Glu	500	505		510	
Leu Gln Asn Leu Ser Ser Ala Glu Val Val Val Pro Arg Asp Gln Thr	515	520		525	
Pro Asp Glu Asn Asp Gln Val Val Val Lys Ile Thr Gly His Phe Tyr	530	535		540	

Ala Cys Gln Val Ala Gln Arg Lys Ile Gln Glu Ile Leu Thr Gln Val  
545 550 555 560

Lys Gln His Gln Gln Gln Lys Ala Leu Gln Ser Gly Pro Pro Gln Ser  
565 570 575

Arg Arg Lys

<210> 450  
<211> 1743  
<212> DNA  
<213> Homo sapiens

<400> 450  
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ttcgtggact gcccggaaga gagctgggccc ctcaaggcca tcgaggcgct ttcaggtaaa 180  
atagaactgc acgggaaacc catagaagtt gagcactcgg tccccaaaag gcaaaggatt 240  
cggaaacttc agatacgaag tatcccgccct cattttacagt gggaggtgct ggatagttaa 300  
ctagtccagt atggagtggt ggagagctgt gagcaagtga aactgactc ggaaactgca 360  
gttgtaaatg taacctattc cagtaaggac caagctagac aagcactaga caaactgaat 420  
ggatttcagt tagagaattt caccttgaaa gtagcctata tccctgatga aacggccgcc 480  
cagcaaaacc ccttgagcga gcccggaggt cggcgggggc ttgggcagag gggctcctca 540  
aggcaggggt ctccaggatc cgtatccaag cagaaacat gtgatttgcc tctgcgcctg 600  
ctggttccca cccaatttgt tggagccatc ataggaaaag aaggtgccac cattcggaac 660  
atcaccaaac agaccagtc taaaatcgat gtccaccgta aagaaaatgc gggggctgct 720  
gagaagtcca ttactatcct ctctactcct gaaggcacct ctgcggcttg taagtctatt 780  
ctggagatta tgcataagga agctcaagat ataaaattca cagaagagat ccccttgaag 840  
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caagcacatt taattccttg attaaatctg aacgccttgg gtctgttccc acccacttca 1140  
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gaggctcagt tcaaggctca gggaagaatt tatggaaaaa ttaaagaaga aaactttgtt 1440  
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gttggtgtcc ctctgtagca gacacctgat gagaatgacc aagtgttgtt caaaataact 1620  
ggtcacttct atgcttgcca ggttgcccag agaaaaattc aggaattctt gactcaggtg 1680  
aagcagcacc aacaacagaa ggctctgcaa agtggaccac ctcagtcaag acggaagtaa 1740  
tga 1743

<210> 451  
<211> 25  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 451

Leu Gly Lys Glu Val Arg Asp Ala Lys Ile Thr Pro Glu Ala Phe Glu  
                           5                          10                          15

Lys Leu Gly Phe Pro Ala Ala Lys Glu  
                           20                          25

&lt;210&gt; 452

&lt;211&gt; 25

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 452

Lys Ala Ser Asp Gly Asp Tyr Tyr Thr Leu Ala Val Pro Met Gly Asp  
                           5                          10                          15

Val Pro Met Asp Gly Ile Ser Val Ala  
                           20                          25

&lt;210&gt; 453

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 453

Pro Asp Arg Asp Val Asn Leu Thr His Gln Leu Asn Pro Lys Val Lys  
                           5                          10                          15

&lt;210&gt; 454

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 454

Lys Ile Ala Pro Ala Glu Ala Pro Asp Ala Lys Val Arg Met Val Ile  
                           5                          10                          15

Ile Thr Gly Pro  
                           20

&lt;210&gt; 455

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 455

Pro Asp Glu Thr Ala Ala Gln Gln Asn Pro Leu Gln Gln Pro Arg Gly  
                           5                          10                          15

Arg Arg Gly Leu

20

<210> 456  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 456  
 Arg Thr Ile Thr Val Lys Gly Asn Val Glu Thr Cys Ala Lys Ala Glu  
                           5                          10                          15

Glu Glu Ile Met  
                   20

<210> 457  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 457  
 Ala Phe Val Asp Cys Pro Asp Glu Ser Trp Ala Leu Lys Ala Ile Glu  
                           5                          10                          15

Ala Leu Ser Gly  
                   20

<210> 458  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 458  
 Ile Arg Lys Leu Gln Ile Arg Asn Ile Pro Pro His Leu Gln Trp Glu  
                           5                          10                          15

Val Leu Asp Ser  
                   20

<210> 459  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 459  
 Ala Gln Gln Asn Pro Leu Gln Gln Pro Arg Gly Arg Arg Gly Leu Gly  
                           5                          10                          15

Gln Arg Gly Ser  
                   20

<210> 460  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 460  
 Asp Val His Arg Lys Glu Asn Ala Gly Ala Ala Glu Lys Ser Ile Thr  
                   5                  10                  15  
 Ile Leu Ser Thr  
                   20

<210> 461  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 461  
 Leu Tyr Asn Pro Glu Arg Thr Ile Thr Val Lys Gly Asn Val Glu Thr  
                   5                  10                  15  
 Cys Ala Lys Ala  
                   20

<210> 462  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 462  
 Glu Glu Glu Ile Met Lys Lys Ile Arg Glu Ser Tyr Glu Asn Asp Ile  
                   5                  10                  15  
 Ala Ser Met Asn  
                   20

<210> 463  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 463  
 Leu Asn Ala Leu Gly Leu Phe Pro Pro Thr Ser Gly Met Pro Pro Pro  
                   5                  10                  15  
 Thr Ser Gly Pro  
                   20

<210> 464  
 <211> 20

<212> PRT

<213> Homo sapiens

<400> 464

Lys Ile Ala Pro Ala Glu Ala Pro Asp Ala Lys Val Arg Met Val Ile  
                           5                          10                          15

Ile Thr Gly Pro  
                   20

<210> 465

<211> 18

<212> PRT

<213> Homo sapiens

<400> 465

Thr Gly Tyr Ala Phe Val Asp Cys Pro Asp Glu Ser Trp Ala Leu Lys Ile  
                           5                          10                          15  
 Glu

<210> 466

<211> 11

<212> PRT

<213> Homo sapiens

<400> 466

Phe Val Asp Cys Pro Asp Glu Ser Trp Ala Leu  
                           5                          10

<210> 467

<211> 33

<212> DNA

<213> Homo sapiens

<400> 467

ttcgtggact gcccgacga gagctgggcc etc

33

<210> 468

<211> 24

<212> PRT

<213> Homo sapiens

<400> 468

Ile Pro Asp Glu Met Ala Ala Gln Gln Asn Pro Leu Gln Gln Pro Arg  
                           5                          10                          15

Gly Arg Arg Gly Leu Gly Gln Arg  
                   20

<210> 469

<211> 24

<212> PRT

<213> Homo sapiens

<400> 469

Ile Pro Asp Glu Thr Ala Ala Gln Gln Asn Pro Ser Pro Gln Leu Arg  
5 10 15

Gly Arg Arg Gly Pro Gly Gln Arg  
20

<210> 470

<211> 20

<212> PRT

<213> Homo sapiens

<400> 470

Ser Gly Pro Phe Leu Val Lys Thr Gly Tyr Ala Phe Val Asp Cys Pro  
5 10 15

Asp Glu Ser Trp  
20

<210> 471

<211> 70

<212> PRT

<213> Homo sapiens

<400> 471

Asp Gln Ala Arg Gln Ala Leu Asp Lys Leu Asn Gly Phe Gln Leu Glu  
5 10 15

Asn Phe Thr Leu Lys Val Ala Tyr Ile Pro Asp Glu Thr Ala Ala Gln  
20 25 30

Gln Asn Pro Leu Gln Gln Pro Arg Gly Arg Arg Gly Leu Gly Gln Arg  
35 40 45

Gly Ser Ser Arg Gln Gly Ser Pro Gly Ser Val Ser Lys Gln Lys Pro  
50 55 60

Cys Asp Leu Pro Leu Arg  
65 70

<210> 472

<211> 70

<212> PRT

<213> Homo sapiens

<400> 472

Lys Gln Lys Pro Cys Asp Leu Pro Leu Arg Leu Leu Val Pro Thr Gln  
5 10 15

Phe Val Gly Ala Ile Ile Gly Lys Glu Gly Ala Thr Ile Arg Asn Ile  
                   20                  25                  30

Thr Lys Gln Thr Gln Ser Lys Ile Asp Val His Arg Lys Glu Asn Ala  
                   35                  40                  45

Gly Ala Ala Glu Lys Ser Ile Thr Ile Leu Ser Thr Pro Glu Gly Thr  
                   50                  55                  60

Ser Ala Ala Cys Lys Ser  
                   65                  70

<210> 473

<211> 70

<212> PRT

<213> Homo sapiens

<400> 473

Pro Glu Gly Thr Ser Ala Ala Cys Lys Ser Ile Leu Glu Ile Met His  
                                   5                  10                  15

Lys Glu Ala Gln Asp Ile Lys Phe Thr Glu Glu Ile Pro Leu Lys Ile  
                   20                  25                  30

Leu Ala His Asn Asn Phe Val Gly Arg Leu Ile Gly Lys Glu Gly Arg  
                   35                  40                  45

Asn Leu Lys Lys Ile Glu Gln Asp Thr Asp Thr Lys Ile Thr Ile Ser  
                   50                  55                  60

Pro Leu Gln Glu Leu Thr  
                   65                  70

<210> 474

<211> 70

<212> PRT

<213> Homo sapiens

<400> 474

Ile Thr Ile Ser Pro Leu Gln Glu Leu Thr Leu Tyr Asn Pro Glu Arg  
                                   5                  10                  15

Thr Ile Thr Val Lys Gly Asn Val Glu Thr Cys Ala Lys Ala Glu Glu  
                   20                  25                  30

Glu Ile Met Lys Lys Ile Arg Glu Ser Tyr Glu Asn Asp Ile Ala Ser  
                   35                  40                  45

Met Asn Leu Gln Ala His Leu Ile Pro Gly Leu Asn Leu Asn Ala Leu  
                   50                  55                  60

Gly Leu Phe Pro Pro Thr  
65 70

<210> 475  
<211> 70  
<212> PRT  
<213> Homo sapiens

<400> 475  
Leu Asn Ala Leu Gly Leu Phe Pro Pro Thr Ser Gly Met Pro Pro Pro  
5 10 15

Thr Ser Gly Pro Pro Ser Ala Met Thr Pro Pro Tyr Pro Gln Phe Glu  
20 25 30

Gln Ser Glu Thr Glu Thr Val His Leu Phe Ile Pro Ala Leu Ser Val  
35 40 45

Gly Ala Ile Ile Gly Lys Gln Gly Gln His Ile Lys Gln Leu Ser Arg  
50 55 60

Phe Ala Gly Ala Ser Ile  
65 70

<210> 476  
<211> 81  
<212> PRT  
<213> Homo sapiens

<400> 476  
Lys Gln Leu Ser Arg Phe Ala Gly Ala Ser Ile Lys Ile Ala Pro Ala  
5 10 15

Glu Ala Pro Asp Ala Lys Val Arg Met Val Ile Ile Thr Gly Pro Pro  
20 25 30

Glu Ala Gln Phe Lys Ala Gln Gly Arg Ile Tyr Gly Lys Ile Lys Glu  
35 40 45

Glu Asn Phe Val Ser Pro Lys Glu Glu Val Lys Leu Glu Ala His Ile  
50 55 60

Arg Val Pro Ser Phe Ala Ala Gly Arg Val Ile Gly Lys Gly Gly Lys  
65 70 75 80

Thr

<210> 477  
<211> 80  
<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 477

Gly Arg Val Ile Gly Lys Gly Gly Lys Thr Val Asn Glu Leu Gln Asn  
                                   5                                  10                                  15  
 Leu Ser Ser Ala Glu Val Val Val Pro Arg Asp Gln Thr Pro Asp Glu  
                                   20                                  25                                  30  
 Asn Asp Gln Val Val Val Lys Ile Thr Gly His Phe Tyr Ala Cys Gln  
                                   35                                  40                                  45  
 Val Ala Gln Arg Lys Ile Gln Glu Ile Leu Thr Gln Val Lys Gln His  
                                   50                                  55                                  60  
 Gln Gln Gln Lys Ala Leu Gln Ser Gly Pro Pro Gln Ser Arg Arg Lys  
                                   65                                  70                                  75                                  80

&lt;210&gt; 478

&lt;211&gt; 1740

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 478

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 cggaaacttc agatacgaat tatcccgccct catttacagt gggagggtgct ggatagttta 300  
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 aggcaggggt ctccaggatc cgtatccaag cagaaaccat gtgatttgcc tctgcgcctg 600  
 ctggttccca cccaatttgt tggagccatc ataggaaaag aagggtgccac cattcggaac 660  
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 gagaagtcga ttactatcct ctctactcct gaaggcacct ctgcggttg taagtctatt 780  
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 ggtcacttct atgcttgcca ggttgcccag agaaaaatc aggaattct gactcaggta 1680  
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<210> 479  
 <211> 34555  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> 34543, 34544, 34545, 34546, 34547  
 <223> n = A, T, C or G

<400> 479  
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 ggaagtgtga tgttgcaagt gtggcgggaa acatgtaagc gacggatgtg gcaaaagtga 180  
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 taagaggaag tgaaatctga ataattttgt gttactcata gcgcgtaata ctgtaatagt 360  
 aatcaattac ggggtcatta gttcatagcc catatatgga gttccgcgtt acataactta 420  
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&lt;211&gt; 579

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 480

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Arg Arg Lys

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 attttagctc ataataactt tgttggccgt cttattggta aagaaggaag aaatcttaa 900  
 aaaattgagc aggacacaga cactaaaatc acgatatctc cattgcagga attgacgctg 960

tataatccag aacgcacccat tacagttaaa ggcaatgttg agacgtgtgc caaagctgag 1020  
gaagagatca tgaagaaaat tagggagtct tatgaaaatg atattgcttc tatgaatctt 1080  
caagcacatt taattcctgg attaaatctg aacgccttgg gtctgttccc acccacttca 1140  
gggatgccac ctcccacctc agggccccct tcagccatga ctctcccta cccgcagttt 1200  
gagcaatcag aaacggagac tgttcattctc tttatcccgg ctctatcagt cggtgccatc 1260  
attggcaagc agggccagca catcaagcag ctttctcgct ttgctggagc ttcaattaag 1320  
attgctccag cagaagcacc agatgctaaa gtgaggatgg tgattatcac tggaccacca 1380  
gaggctcagt tcaaggctca gggaagaatt tatggaaaaa ttaaagaaga aaactttgtt 1440  
agtcctaaag aagaggtgaa acttgaagct catatcagag tgccatgctt tgctggtggc 1500  
agagttattg gaaaaggagg caaaacggtg aatgaacttc agaatttgtc aagtgcagaa 1560  
gttgttgctc ctctgaccca gacacctgat gagaatgacc aagtgggtgt caaaataact 1620  
ggtcacttct atgcttgcca ggttgcccag agaaaaattc aggaaattct gactcaggtta 1680  
aagcagcacc aacaacagaa ggctctgcaa agtggtgacc ctcagtcaag acggaagtaa 1740

<210> 484

<211> 579

<212> PRT

<213> primate

<400> 484

Met Asn Lys Leu Tyr Ile Gly Asn Leu Ser Asp Asn Ala Ala Pro Ser  
5 10 15

Asp Leu Glu Ser Ile Phe Lys Asp Ala Lys Ile Pro Val Ser Gly Pro  
20 25 30

Phe Leu Val Lys Thr Gly Tyr Ala Phe Val Asp Cys Pro Asp Glu Ser  
35 40 45

Trp Ala Leu Lys Ala Ile Glu Ala Leu Ser Gly Lys Ile Glu Leu His  
50 55 60

Gly Lys Pro Ile Glu Val Glu His Ser Val Pro Lys Arg Gln Arg Ile  
65 70 75 80

Arg Lys Leu Gln Ile Arg Asn Ile Pro Pro His Leu Gln Trp Glu Val  
85 90 95

Leu Asp Ser Leu Leu Val Gln Tyr Gly Val Val Glu Ser Cys Glu Gln  
100 105 110

Val Asn Thr Asp Ser Glu Thr Ala Val Val Asn Val Thr Tyr Ser Ser  
115 120 125

Lys Asp Gln Ala Arg Gln Ala Leu Asp Lys Leu Asn Gly Phe Gln Leu  
130 135 140

Glu Asn Phe Thr Leu Lys Val Ala Tyr Ile Pro Asp Glu Met Ala Ala  
145 150 155 160

Gln Gln Asn Pro Leu Gln Gln Pro Arg Gly Arg Arg Gly Leu Gly Gln  
165 170 175

Arg Gly Ser Ser Arg Gln Gly Ser Pro Gly Ser Val Ser Lys Gln Lys

180	185	190
Pro Cys Asp Leu Pro Leu Arg Leu Leu Val Pro Thr Gln Phe Val Gly		
195	200	205
Ala Ile Ile Gly Lys Glu Gly Ala Thr Ile Arg Asn Ile Thr Lys Gln		
210	215	220
Thr Gln Ser Lys Ile Asp Val His Arg Lys Glu Asn Ala Gly Ala Ala		
225	230	235
Glu Lys Ser Ile Thr Ile Leu Ser Thr Pro Glu Gly Thr Ser Ala Ala		
245	250	255
Cys Lys Ser Ile Leu Glu Ile Met His Lys Glu Ala Gln Asp Ile Lys		
260	265	270
Phe Thr Glu Glu Ile Pro Leu Lys Ile Leu Ala His Asn Asn Phe Val		
275	280	285
Gly Arg Leu Ile Gly Lys Glu Gly Arg Asn Leu Lys Lys Ile Glu Gln		
290	295	300
Asp Thr Asp Thr Lys Ile Thr Ile Ser Pro Leu Gln Glu Leu Thr Leu		
305	310	315
Tyr Asn Pro Glu Arg Thr Ile Thr Val Lys Gly Asn Val Glu Thr Cys		
325	330	335
Ala Lys Ala Glu Glu Glu Ile Met Lys Lys Ile Arg Glu Ser Tyr Glu		
340	345	350
Asn Asp Ile Ala Ser Met Asn Leu Gln Ala His Leu Ile Pro Gly Leu		
355	360	365
Asn Leu Asn Ala Leu Gly Leu Phe Pro Pro Thr Ser Gly Met Pro Pro		
370	375	380
Pro Thr Ser Gly Pro Pro Ser Ala Met Thr Pro Pro Tyr Pro Gln Phe		
385	390	395
Glu Gln Ser Glu Thr Glu Thr Val His Leu Phe Ile Pro Ala Leu Ser		
405	410	415
Val Gly Ala Ile Ile Gly Lys Gln Gly Gln His Ile Lys Gln Leu Ser		
420	425	430
Arg Phe Ala Gly Ala Ser Ile Lys Ile Ala Pro Ala Glu Ala Pro Asp		
435	440	445
Ala Lys Val Arg Met Val Ile Ile Thr Gly Pro Pro Glu Ala Gln Phe		
450	455	460
Lys Ala Gln Gly Arg Ile Tyr Gly Lys Ile Lys Glu Glu Asn Phe Val		

465		470		475		480
Ser Pro Lys Glu Glu Val Lys Leu Glu Ala His Ile Arg Val Pro Cys						
	485		490		495	
Phe Ala Gly Gly Arg Val Ile Gly Lys Gly Gly Lys Thr Val Asn Glu						
	500		505		510	
Leu Gln Asn Leu Ser Ser Ala Glu Val Val Val Pro Arg Asp Gln Thr						
	515		520		525	
Pro Asp Glu Asn Asp Gln Val Val Val Lys Ile Thr Gly His Phe Tyr						
	530		535		540	
Ala Cys Gln Val Ala Gln Arg Lys Ile Gln Glu Ile Leu Thr Gln Val						
	545		550		555	560
Lys Gln His Gln Gln Gln Lys Ala Leu Gln Ser Gly Pro Pro Gln Ser						
	565		570		575	
Arg Arg Lys						

<210> 485  
 <211> 1799  
 <212> DNA  
 <213> Homo sapiens

<400> 485  
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 cccctcggac ctgaaaagta tcttcaagga cgccaagatc ccggtgtcgg gacccttcct 120  
 ggtgaagact ggctacgcgt tcgtggactg cccggacgag agctgggccc tcaaggccat 180  
 cgaggcgctt tcaggtaaaa tagaactgca cgggaaaacc atagaagttg agcactcgg 240  
 cccaaaaagg caaaggattc ggaaacttca gatacgaaat atcccgccctc atttacagt 300  
 ggaggtgctg gatagtttac tagtccagta tggagtgggt gagagctgtg agcaagtga 360  
 cactgactcg gaaactgcag ttgtaaatgt aacctattcc agtaaggacc aagctagaca 420  
 agcactagac aaactgaatg gatttcagtt agagaatttc acctgaaag tagcctatat 480  
 ccctgatgaa acggccgccc agcaaaaccc cttgcagcag ccccgaggtc gccgggggct 540  
 tgggcagagg ggctcctcaa ggcaggggtc tccaggatcc gtatccaagc agaaaccatg 600  
 tgatttgcct ctgcgcctgc tggttccac ccaatttggt ggagccatca taggaaaaga 660  
 aggtgccacc attcggaaca tcaccaaaca gaccagtcct aaaatcgatg tccaccgtaa 720  
 agaaaatgcg ggggctgctg agaagtcgat tactatcctc tctactcctg aaggcaacct 780  
 tgcggcttgt aagtctattc tggagattat gcataaggaa gctcaagata taaaattcac 840  
 agaagagatc cccttgaaga ttttagctca taataacttt gttggacgtc ttattggtaa 900  
 agaaggaaga aatcttaaaa aaattgagca agacacagac actaaaatca cgatatctcc 960  
 attgcaggaa ttgacgctgt ataatccaga acgcactatt acagttaaag gcaatgttga 1020  
 gacatgtgcc aaagctgagg aggagatcat gaagaaaatc agggagtctt atgaaaatga 1080  
 tattgttctt atgaatcttc aagcacattt aattcctgga ttaaactctga acgccttggg 1140  
 tctgttccca ccacttcag ggatgccacc tcccacctca gggccccctt cagccatgac 1200  
 tcctccctac ccgcagtttg agcaatcaga aacggagact gttcatctgt ttatccagc 1260  
 tctatcagtc ggtgccatca tcggcaagca gggccagcac atcaagcagc tttctcgctt 1320  
 tgctggagct tcaattaaga ttgctccagc ggaagcacca gatgctaaag tgaggatgg 1380  
 gattatcact ggaccaccag aggctcagtt caaggctcag ggaagaattt atggaaaaat 1440

taaagaagaa aactttgtta gtcctaaaga agaggtgaaa cttgaagctc atatcagagt 1500  
 gccatccttt gctgctggca gagttattgg aaaaggaggc aaaacggtga atgaacttca 1560  
 gaatttgtca agtgcagaag ttgttgctcc tcgtgaccag acacctgatg agaatgacca 1620  
 agtggttgtc aaaataactg gtcacttcta tgcttgccag gttgccaga gaaaaattca 1680  
 ggaaattctg actcaggtaa agcagcacca acaacagaag gctctgcaaa gtggaccacc 1740  
 tcagtcaaga cggaagcatc atcaccatca tcatcaccat caccattaag aattcccc 1799

<210> 486

<211> 589

<212> PRT

<213> Homo sapiens

<400> 486

Met Asn Lys Leu Tyr Ile Gly Asn Leu Ser Glu Asn Ala Ala Pro Ser  
                   5                  10                  15

Asp Leu Glu Ser Ile Phe Lys Asp Ala Lys Ile Pro Val Ser Gly Pro  
                   20                  25                  30

Phe Leu Val Lys Thr Gly Tyr Ala Phe Val Asp Cys Pro Asp Glu Ser  
                   35                  40                  45

Trp Ala Leu Lys Ala Ile Glu Ala Leu Ser Gly Lys Ile Glu Leu His  
                   50                  55                  60

Gly Lys Pro Ile Glu Val Glu His Ser Val Pro Lys Arg Gln Arg Ile  
                   65                  70                  75                  80

Arg Lys Leu Gln Ile Arg Asn Ile Pro Pro His Leu Gln Trp Glu Val  
                   85                  90                  95

Leu Asp Ser Leu Leu Val Gln Tyr Gly Val Val Glu Ser Cys Glu Gln  
                   100                  105                  110

Val Asn Thr Asp Ser Glu Thr Ala Val Val Asn Val Thr Tyr Ser Ser  
                   115                  120                  125

Lys Asp Gln Ala Arg Gln Ala Leu Asp Lys Leu Asn Gly Phe Gln Leu  
                   130                  135                  140

Glu Asn Phe Thr Leu Lys Val Ala Tyr Ile Pro Asp Glu Thr Ala Ala  
                   145                  150                  155                  160

Gln Gln Asn Pro Leu Gln Gln Pro Arg Gly Arg Arg Gly Leu Gly Gln  
                   165                  170                  175

Arg Gly Ser Ser Arg Gln Gly Ser Pro Gly Ser Val Ser Lys Gln Lys  
                   180                  185                  190

Pro Cys Asp Leu Pro Leu Arg Leu Leu Val Pro Thr Gln Phe Val Gly  
                   195                  200                  205

Ala Ile Ile Gly Lys Glu Gly Ala Thr Ile Arg Asn Ile Thr Lys Gln  
                   210                  215                  220

Thr	Gln	Ser	Lys	Ile	Asp	Val	His	Arg	Lys	Glu	Asn	Ala	Gly	Ala	Ala		
225					230					235					240		
Glu	Lys	Ser	Ile	Thr	Ile	Leu	Ser	Thr	Pro	Glu	Gly	Thr	Ser	Ala	Ala		
				245					250					255			
Cys	Lys	Ser	Ile	Leu	Glu	Ile	Met	His	Lys	Glu	Ala	Gln	Asp	Ile	Lys		
			260					265					270				
Phe	Thr	Glu	Glu	Ile	Pro	Leu	Lys	Ile	Leu	Ala	His	Asn	Asn	Phe	Val		
		275					280					285					
Gly	Arg	Leu	Ile	Gly	Lys	Glu	Gly	Arg	Asn	Leu	Lys	Lys	Ile	Glu	Gln		
	290					295					300						
Asp	Thr	Asp	Thr	Lys	Ile	Thr	Ile	Ser	Pro	Leu	Gln	Glu	Leu	Thr	Leu		
305					310					315					320		
Tyr	Asn	Pro	Glu	Arg	Thr	Ile	Thr	Val	Lys	Gly	Asn	Val	Glu	Thr	Cys		
				325					330					335			
Ala	Lys	Ala	Glu	Glu	Glu	Ile	Met	Lys	Lys	Ile	Arg	Glu	Ser	Tyr	Glu		
			340					345					350				
Asn	Asp	Ile	Ala	Ser	Met	Asn	Leu	Gln	Ala	His	Leu	Ile	Pro	Gly	Leu		
		355					360					365					
Asn	Leu	Asn	Ala	Leu	Gly	Leu	Phe	Pro	Pro	Thr	Ser	Gly	Met	Pro	Pro		
	370					375					380						
Pro	Thr	Ser	Gly	Pro	Pro	Ser	Ala	Met	Thr	Pro	Pro	Tyr	Pro	Gln	Phe		
385					390					395					400		
Glu	Gln	Ser	Glu	Thr	Glu	Thr	Val	His	Leu	Phe	Ile	Pro	Ala	Leu	Ser		
				405					410					415			
Val	Gly	Ala	Ile	Ile	Gly	Lys	Gln	Gly	Gln	His	Ile	Lys	Gln	Leu	Ser		
		420						425					430				
Arg	Phe	Ala	Gly	Ala	Ser	Ile	Lys	Ile	Ala	Pro	Ala	Glu	Ala	Pro	Asp		
		435					440					445					
Ala	Lys	Val	Arg	Met	Val	Ile	Ile	Thr	Gly	Pro	Pro	Glu	Ala	Gln	Phe		
	450					455				460							
Lys	Ala	Gln	Gly	Arg	Ile	Tyr	Gly	Lys	Ile	Lys	Glu	Glu	Asn	Phe	Val		
465					470					475					480		
Ser	Pro	Lys	Glu	Glu	Val	Lys	Leu	Glu	Ala	His	Ile	Arg	Val	Pro	Ser		
				485					490					495			
Phe	Ala	Ala	Gly	Arg	Val	Ile	Gly	Lys	Gly	Gly	Lys	Thr	Val	Asn	Glu		
			500					505					510				

Leu Gln Asn Leu Ser Ser Ala Glu Val Val Val Pro Arg Asp Gln Thr  
           515                          520                          525

Pro Asp Glu Asn Asp Gln Val Val Val Lys Ile Thr Gly His Phe Tyr  
       530                          535                          540

Ala Cys Gln Val Ala Gln Arg Lys Ile Gln Glu Ile Leu Thr Gln Val  
       545                          550                          555                          560

Lys Gln His Gln Gln Gln Lys Ala Leu Gln Ser Gly Pro Pro Gln Ser  
                           565                          570                          575

Arg Arg Lys His His His His His His His His His His  
                           580                          585

<210> 487

<211> 49

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 487

gggggaattc gccgccacca tgaacaaact gtatatcgga aacctcagc

49

<210> 488

<211> 67

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 488

gggggaattc ttaatggtga tggatgatgat gatggtgatg atgcttccgt cttgactgag  
 gtggtcc

60  
67

<210> 489

<211> 30

<212> DNA

<213> Homo sapiens

<400> 489

tcagagaacc agggagcctt caagggcacg

30

<210> 490

<211> 10

<212> PRT

<213> Homo sapiens

&lt;400&gt; 490

Ser Glu Asn Gln Gly Ala Phe Lys Gly Met  
                           5                          10

&lt;210&gt; 491

&lt;211&gt; 9

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 491

Ala Ala Pro Ser Asp Leu Glu Ser Ile

&lt;210&gt; 492

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 492

Ser Thr Gly Asp Ala Asp Gly Pro Gly Gly Pro Gly Ile Pro Asp Gly  
                           5                          10                          15

Pro Gly Gly Asn  
                           20

&lt;210&gt; 493

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 493

Pro Gly Ile Pro Asp Gly Pro Gly Gly Asn Ala Gly Gly Pro Gly Glu  
                           5                          10                          15

Ala Gly Ala Thr  
                           20

&lt;210&gt; 494

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 494

Tyr Leu Ala Met Pro Phe Ala Thr Pro Met Glu Ala Glu Leu Ala Arg  
                           5                          10                          15

Arg Ser Leu Ala  
                           20

&lt;210&gt; 495

&lt;211&gt; 20

&lt;212&gt; PRT

<213> Homo sapiens

<400> 495

Trp Ile Thr Gln Cys Phe Leu Pro Val Phe Leu Ala Gln Pro Pro Ser  
5 10 15

Gly Gln Arg Arg  
20

<210> 496

<211> 20

<212> PRT

<213> Homo sapiens

<400> 496

Gly Gly Arg Gly Pro Arg Gly Ala Gly Ala Ala Arg Ala Ser Gly Pro  
1 5 10 15

Gly Gly Gly Ala  
20

<210> 497

<211> 20

<212> PRT

<213> Homo sapiens

<400> 497

Lys Ile Ala Pro Ala Glu Ala Pro Asp Ala Lys Val Arg Met Val Ile  
5 10 15

Ile Thr Gly Pro  
20

<210> 498

<211> 20

<212> PRT

<213> Homo sapiens

<400> 498

Lys Ile Ala Pro Pro Glu Thr Pro Asp Ser Lys Val Arg Met Val Ile  
5 10 15

Ile Thr Gly Pro  
20

<210> 499

<211> 20

<212> PRT

<213> Homo sapiens

<400> 499

Lys Ile Ala Pro Ala Glu Gly Pro Asp Val Ser Glu Arg Met Val Ile  
                                   5                                  10                                  15

Ile Thr Gly Pro  
                                   20

<210> 500  
 <211> 577  
 <212> PRT.  
 <213> Homo sapiens

<400> 500  
 Met Asn Lys Leu Tyr Ile Gly Asn Leu Asn Glu Ser Val Thr Pro Ala  
                                   5                                  10                                  15

Asp Leu Glu Lys Val Phe Ala Glu His Lys Ile Ser Tyr Ser Gly Gln  
                                   20                                  25                                  30

Phe Leu Val Lys Ser Gly Tyr Ala Phe Val Asp Cys Pro Asp Glu His  
                                   35                                  40                                  45

Trp Ala Met Lys Ala Ile Glu Thr Phe Ser Gly Lys Val Glu Leu Gln  
                                   50                                  55                                  60

Gly Lys Arg Leu Glu Ile Glu His Ser Val Pro Lys Lys Gln Arg Ser  
                                   65                                  70                                  75                                  80

Arg Lys Ile Gln Ile Arg Asn Ile Pro Pro Gln Leu Arg Trp Glu Val  
                                   85                                  90                                  95

Leu Asp Ser Leu Leu Ala Gln Tyr Gly Thr Val Glu Asn Cys Glu Gln  
                                   100                                  105                                  110

Val Asn Thr Glu Ser Glu Thr Ala Val Val Asn Val Thr Tyr Ser Asn  
                                   115                                  120                                  125

Arg Glu Gln Thr Arg Gln Ala Ile Met Lys Leu Asn Gly His Gln Leu  
                                   130                                  135                                  140

Glu Asn His Ala Leu Lys Val Ser Tyr Ile Pro Asp Glu Gln Ile Ala  
                                   145                                  150                                  155                                  160

Gln Gly Pro Glu Asn Gly Arg Arg Gly Gly Phe Gly Ser Arg Gly Gln  
                                   165                                  170                                  175

Pro Arg Gln Gly Ser Pro Val Ala Ala Gly Ala Pro Ala Lys Gln Gln  
                                   180                                  185                                  190

Gln Val Asp Ile Pro Leu Arg Leu Leu Val Pro Thr Gln Tyr Val Gly  
                                   195                                  200                                  205

Ala Ile Ile Gly Lys Glu Gly Ala Thr Ile Arg Asn Ile Thr Lys Gln  
                                   210                                  215                                  220

Thr	Gln	Ser	Lys	Ile	Asp	Val	His	Arg	Lys	Glu	Asn	Ala	Gly	Ala	Ala	225	230	235	240
Glu	Lys	Ala	Ile	Ser	Val	His	Ser	Thr	Pro	Glu	Gly	Cys	Ser	Ser	Ala	245	250	255	
Cys	Lys	Met	Ile	Leu	Glu	Ile	Met	His	Lys	Glu	Ala	Lys	Asp	Thr	Lys	260	265	270	
Thr	Ala	Asp	Glu	Val	Pro	Leu	Lys	Ile	Leu	Ala	His	Asn	Asn	Phe	Val	275	280	285	
Gly	Arg	Leu	Ile	Gly	Lys	Glu	Gly	Arg	Asn	Leu	Lys	Lys	Val	Glu	Gln	290	295	300	
Asp	Thr	Glu	Thr	Lys	Ile	Thr	Ile	Ser	Ser	Leu	Gln	Asp	Leu	Thr	Leu	305	310	315	320
Tyr	Asn	Pro	Glu	Arg	Thr	Ile	Thr	Val	Lys	Gly	Ala	Ile	Glu	Asn	Cys	325	330	335	
Cys	Arg	Ala	Glu	Gln	Glu	Ile	Met	Lys	Lys	Val	Arg	Glu	Ala	Tyr	Glu	340	345	350	
Asn	Asp	Val	Ala	Ala	Met	Ser	Leu	Gln	Ser	His	Leu	Ile	Pro	Gly	Leu	355	360	365	
Asn	Leu	Ala	Ala	Val	Gly	Leu	Phe	Pro	Ala	Ser	Ser	Ser	Ala	Val	Pro	370	375	380	
Pro	Pro	Pro	Ser	Ser	Val	Thr	Gly	Ala	Ala	Pro	Tyr	Ser	Ser	Phe	Met	385	390	395	400
Gln	Ala	Pro	Glu	Gln	Glu	Met	Val	Gln	Val	Phe	Ile	Pro	Ala	Gln	Ala	405	410	415	
Val	Gly	Ala	Ile	Ile	Gly	Lys	Lys	Gly	Gln	His	Ile	Lys	Gln	Leu	Ser	420	425	430	
Arg	Phe	Ala	Ser	Ala	Ser	Ile	Lys	Ile	Ala	Pro	Pro	Glu	Thr	Pro	Asp	435	440	445	
Ser	Lys	Val	Arg	Met	Val	Ile	Ile	Thr	Gly	Pro	Pro	Glu	Ala	Gln	Phe	450	455	460	
Lys	Ala	Gln	Gly	Arg	Ile	Tyr	Gly	Lys	Leu	Lys	Glu	Glu	Asn	Phe	Phe	465	470	475	480
Gly	Pro	Lys	Glu	Glu	Val	Lys	Leu	Glu	Thr	His	Ile	Arg	Val	Pro	Ala	485	490	495	
Ser	Ala	Ala	Gly	Arg	Val	Ile	Gly	Lys	Gly	Gly	Lys	Thr	Val	Asn	Glu	500	505	510	

Leu Gln Asn Leu Thr Ala Ala Glu Val Val Val Pro Arg Asp Gln Thr  
515 520 525

Pro Asp Glu Asn Asp Gln Val Ile Val Lys Ile Ile Gly His Phe Tyr  
530 535 540

Ala Ser Gln Met Ala Gln Arg Lys Ile Arg Asp Ile Leu Ala Gln Val  
545 550 555 560

Lys Gln Gln His Gln Lys Gly Gln Ser Asn Gln Ala Gln Ala Arg Arg  
565 570 575

Lys

<210> 501

<211> 587

<212> PRT

<213> Homo sapiens

<400> 501

Met Asn Lys Leu Tyr Ile Gly Asn Leu Ser Pro Ala Val Thr Ala Asp  
5 10 15

Asp Leu Arg Gln Leu Phe Gly Asp Arg Lys Leu Pro Leu Ala Gly Gln  
20 25 30

Val Leu Leu Lys Ser Gly Tyr Ala Phe Val Asp Tyr Pro Asp Gln Asn  
35 40 45

Trp Ala Ile Arg Ala Ile Glu Thr Leu Ser Gly Lys Val Glu Leu His  
50 55 60

Gly Lys Ile Met Glu Val Asp Tyr Ser Val Ser Lys Lys Leu Arg Ser  
65 70 75 80

Arg Lys Ile Gln Ile Arg Asn Ile Pro Pro His Leu Gln Trp Glu Val  
85 90 95

Leu Asp Gly Leu Leu Ala Gln Tyr Gly Thr Val Glu Asn Val Glu Gln  
100 105 110

Val Asn Thr Asp Thr Glu Thr Ala Val Val Asn Val Thr Tyr Ala Thr  
115 120 125

Arg Glu Glu Ala Lys Ile Ala Met Glu Lys Leu Ser Gly His Gln Phe  
130 135 140

Glu Asn Tyr Ser Phe Lys Ile Ser Tyr Ile Pro Asp Glu Glu Val Ser  
145 150 155 160

Ser Pro Ser Pro Pro Gln Arg Ala Gln Arg Gly Asp His Ser Ser Arg

165																170																175															
Glu	Gln	Gly	His 180			Ala	Pro	Gly	Gly	Thr 185			Ser	Gln	Ala	Arg	Gln	Ile	Asp																												
Phe	Pro	Leu	Arg 195			Ile	Leu	Val	Pro	Thr	Gln	Phe	Val	Gly	Ala 205			Ala	Ile	Ile																											
Gly	Lys	Glu	Gly	Leu	Thr	Ile 215			Lys	Asn	Ile	Thr	Lys	Gln	Thr	Gln	Ser																														
Arg	Val	Asp	Ile	His	Arg	230			Lys	Glu	Asn	Ser	Gly	Ala	Ala	Glu	Lys	Pro																													
225													235					240																													
Val	Thr	Ile	His	Ala	Thr	Pro	Glu	Gly	Thr 250			Ser	Glu	Ala	Cys	Arg	Met																														
Ile	Leu	Glu	Ile 260			Met	Gln	Lys	Glu	Ala	Asp	Glu	Thr	Lys	Leu	Ala	Glu																														
Glu	Ile	Pro	Leu	Lys	Ile	Leu	Ala	His	Asn	Gly	Leu	Val	Gly	Arg	Leu																																
Ile	Gly	Lys	Glu	Gly	Arg	Asn	Leu	Lys	Lys	Ile	Glu	His	Glu	Thr	Gly																																
Thr	Lys	Ile	Thr	Ile	Ser	Ser	Leu	Gln	Asp	Leu	Ser	Ile	Tyr	Asn	Pro																																
305					310					315					320																																
Glu	Arg	Thr	Ile	Thr	Val	Lys	Gly	Thr	Val	Glu	Ala	Cys	Ala	Ser	Ala																																
Glu	Ile	Glu	Ile 340			Met	Lys	Lys	Leu	Arg	Glu	Ala	Phe	Glu	Asn	Asp	Met																														
Leu	Ala	Val	Asn	Gln	Gln	Ala	Asn	Leu	Ile	Pro	Gly	Leu	Asn	Leu	Ser																																
355							360					365																																			
Ala	Leu	Gly	Ile	Phe	Ser	Thr	Gly	Leu	Ser	Val	Leu	Ser	Pro	Pro	Ala																																
370						375					380																																				
Gly	Pro	Arg	Gly	Ala	Pro	Pro	Ala	Ala	Pro	Tyr	His	Pro	Phe	Thr	Thr																																
385					390					395					400																																
His	Ser	Gly	Tyr	Phe	Ser	Ser	Leu	Tyr	Pro	His	His	Gln	Phe	Gly	Pro																																
405										410				415																																	
Phe	Pro	His	His	His	Ser	Tyr	Pro	Glu	Gln	Glu	Ile	Val	Asn	Leu	Phe																																
420								425					430																																		
Ile	Pro	Thr	Gln	Ala	Val	Gly	Ala	Ile	Ile	Gly	Lys	Lys	Gly	Ala	His																																
435						440						445																																			
Ile	Lys	Gln	Leu	Ala	Arg	Phe	Ala	Gly	Ala	Ser	Ile	Lys	Ile	Ala	Pro																																

450		455		460
Ala Glu Gly Pro Asp Val Ser Glu Arg Met Val Ile Ile Thr Gly Pro				
465		470		480
Pro Glu Ala Gln Phe Lys Ala Gln Gly Arg Ile Phe Gly Lys Leu Lys				
	485		490	495
Glu Glu Asn Phe Phe Asn Pro Lys Glu Glu Val Lys Leu Glu Ala His				
	500		505	510
Ile Arg Val Pro Ser Ser Thr Ala Gly Arg Val Ile Gly Lys Gly Gly				
	515		520	525
Lys Thr Val Asn Glu Leu Gln Asn Leu Thr Ser Ala Glu Val Ile Val				
	530		535	540
Pro Arg Asp Gln Thr Pro Asp Glu Asn Glu Glu Val Ile Val Arg Ile				
545		550		555
Ile Gly His Phe Phe Ala Ser Gln Thr Ala Gln Arg Lys Ile Arg Glu				
	565		570	575
Ile Val Gln Gln Val Lys Gln Gln Glu Gln Lys				
	580		585	

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Cys Cys Arg Ala  
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 <213> Homo sapiens

<400> 503  
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Cys Ala Ser Ala  
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<212> PRT  
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<400> 504  
 Met Asn Lys Leu Tyr Ile Gly Asn Leu Ser Glu Asn Ala Ala Pro Ser  
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 Asp Leu Glu

<210> 505  
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<400> 505  
 Ser Glu Asn Ala Ala Pro Ser Asp Leu Glu Ser Ile Phe Lys Asp Ala  
 1 5 10 15  
 Lys Ile Pro Val  
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<210> 506  
 <211> 20  
 <212> PRT  
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<400> 506  
 Ser Ile Phe Lys Asp Ala Lys Ile Pro Val Ser Gly Pro Phe Leu Val  
 1 5 10 15  
 Lys Thr Gly Tyr  
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<210> 507  
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<400> 507  
 Ser Gly Pro Phe Leu Val Lys Thr Gly Tyr Ala Phe Val Asp Cys Pro  
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 Asp Glu Ser Trp  
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<400> 508  
 Ala Phe Val Asp Cys Pro Asp Glu Ser Trp Ala Leu Lys Ala Ile Glu  
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Ala Leu Ser Gly  
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<210> 509  
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<400> 509  
Ala Leu Lys Ala Ile Glu Ala Leu Ser Gly Lys Ile Glu Leu His Gly  
1 5 10 15  
Lys Pro Ile Glu  
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<210> 510  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 510  
Lys Ile Glu Leu His Gly Lys Pro Ile Glu Val Glu His Ser Val Pro  
1 5 10 15  
Lys Arg Gln Arg  
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<210> 511  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 511  
Val Glu His Ser Val Pro Lys Arg Gln Arg Ile Arg Lys Leu Gln Ile  
1 5 10 15  
Arg Asn Ile Pro  
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<210> 512  
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<212> PRT  
<213> Homo sapiens

<400> 512  
Ile Arg Lys Leu Gln Ile Arg Asn Ile Pro Pro His Leu Gln Trp Glu  
1 5 10 15  
Val Leu Asp Ser  
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<210> 513  
<211> 20

<212> PRT  
 <213> Homo sapiens

<400> 513  
 Pro His Leu Gln Trp Glu Val Leu Asp Ser Leu Leu Val Gln Tyr Gly  
 1 5 10 15  
 Val Val Glu Ser  
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<210> 514  
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 <212> PRT  
 <213> Homo sapiens

<400> 514  
 Leu Leu Val Gln Tyr Gly Val Val Glu Ser Cys Glu Gln Val Asn Thr  
 1 5 10 15  
 Asp Ser Glu Thr  
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<210> 515  
 <211> 19  
 <212> PRT  
 <213> Homo sapiens

<400> 515  
 Glu Gln Val Asn Thr Asp Ser Glu Thr Ala Val Val Asn Val Thr Tyr  
 1 5 10 15  
 Ser Ser Lys

<210> 516  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 516  
 Ala Val Val Asn Val Thr Tyr Ser Ser Lys Asp Gln Ala Arg Gln Ala  
 1 5 10 15  
 Leu Asp Lys Leu  
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<210> 517  
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 <212> PRT  
 <213> Homo sapiens

<400> 517  
 Asp Gln Ala Arg Gln Ala Leu Asp Lys Leu Asn Gly Phe Gln Leu Glu  
 1 5 10 15

Asn Phe Thr Leu  
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<210> 518  
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<212> PRT  
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<400> 518  
Asn Gly Phe Gln Leu Glu Asn Phe Thr Leu Lys Val Ala Tyr Ile Pro  
1 5 10 15  
Asp Glu Thr Ala  
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<210> 519  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 519  
Lys Val Ala Tyr Ile Pro Asp Glu Thr Ala Ala Gln Gln Asn Pro Leu  
1 5 10 15  
Gln Gln Pro Arg  
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<210> 520  
<211> 20  
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<213> Homo sapiens

<400> 520  
Ala Gln Gln Asn Pro Leu Gln Gln Pro Arg Gly Arg Arg Gly Leu Gly  
1 5 10 15  
Gln Arg Gly Ser  
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<212> PRT  
<213> Homo sapiens

<400> 521  
Gly Arg Arg Gly Leu Gly Gln Arg Gly Ser Ser Arg Gln Gly Ser Pro  
1 5 10 15  
Gly Ser Val Ser  
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<210> 522  
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<212> PRT  
 <213> Homo sapiens

<400> 522  
 Ser Arg Gln Gly Ser Pro Gly Ser Val Ser Lys Gln Lys Pro Cys Asp  
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 Leu Pro Leu Arg  
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<210> 523  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 523  
 Lys Gln Lys Pro Cys Asp Leu Pro Leu Arg Leu Leu Val Pro Thr Gln  
 1 5 10 15  
 Phe Val Gly Ala  
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<210> 524  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 524  
 Leu Leu Val Pro Thr Gln Phe Val Gly Ala Ile Ile Gly Lys Glu Gly  
 1 5 10 15  
 Ala Thr Ile Arg  
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<210> 525  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 525  
 Ile Ile Gly Lys Glu Gly Ala Thr Ile Arg Asn Ile Thr Lys Gln Thr  
 1 5 10 15  
 Gln Ser Lys Ile  
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<210> 526  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 526  
 Asn Ile Thr Lys Gln Thr Gln Ser Lys Ile Asp Val His Arg Lys Glu  
 1 5 10 15

Asn Ala Gly Ala  
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<210> 527  
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<213> Homo sapiens

<400> 527  
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1 5 10 15  
Ile Leu Ser Thr  
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<210> 528  
<211> 20  
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<213> Homo sapiens

<400> 528  
Ala Glu Lys Ser Ile Thr Ile Leu Ser Thr Pro Glu Gly Thr Ser Ala  
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Ala Cys Lys Ser  
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<210> 529  
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<212> PRT  
<213> Homo sapiens

<400> 529  
Pro Glu Gly Thr Ser Ala Ala Cys Lys Ser Ile Leu Glu Ile Met His  
1 5 10 15  
Lys Glu Ala Gln  
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<210> 530  
<211> 20  
<212> PRT  
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<400> 530  
Ile Leu Glu Ile Met His Lys Glu Ala Gln Asp Ile Lys Phe Thr Glu  
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Glu Ile Pro Leu  
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<210> 531  
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<212> PRT  
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<400> 531  
 Asp Ile Lys Phe Thr Glu Glu Ile Pro Leu Lys Ile Leu Ala His Asn  
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 Asn Phe Val Gly  
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<210> 532  
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<400> 532  
 Lys Ile Leu Ala His Asn Asn Phe Val Gly Arg Leu Ile Gly Lys Glu  
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 Gly Arg Asn Leu  
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<210> 533  
 <211> 20  
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<400> 533  
 Arg Leu Ile Gly Lys Glu Gly Arg Asn Leu Lys Lys Ile Glu Gln Asp  
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 Thr Asp Thr Lys  
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<210> 534  
 <211> 20  
 <212> PRT  
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<400> 534  
 Lys Lys Ile Glu Gln Asp Thr Asp Thr Lys Ile Thr Ile Ser Pro Leu  
 1 5 10 15  
 Gln Glu Leu Thr  
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<210> 535  
 <211> 20  
 <212> PRT  
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<400> 535  
 Ile Thr Ile Ser Pro Leu Gln Glu Leu Thr Leu Tyr Asn Pro Glu Arg  
 1 5 10 15

Thr Ile Thr Val  
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<210> 536  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 536  
Leu Tyr Asn Pro Glu Arg Thr Ile Thr Val Lys Gly Asn Val Glu Thr  
1 5 10 15  
Cys Ala Lys Ala  
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<210> 537  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 537  
Lys Gly Asn Val Glu Thr Cys Ala Lys Ala Glu Glu Glu Ile Met Lys  
1 5 10 15  
Lys Ile Arg Glu  
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<210> 538  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 538  
Glu Glu Glu Ile Met Lys Lys Ile Arg Glu Ser Tyr Glu Asn Asp Ile  
1 5 10 15  
Ala Ser Met Asn  
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<210> 539  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 539  
Ser Tyr Glu Asn Asp Ile Ala Ser Met Asn Leu Gln Ala His Leu Ile  
1 5 10 15  
Pro Gly Leu Asn  
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<210> 540  
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<212> PRT  
 <213> Homo sapiens

<400> 540  
 Leu Gln Ala His Leu Ile Pro Gly Leu Asn Leu Asn Ala Leu Gly Leu  
 1 5 10 15  
 Phe Pro Pro Thr  
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<210> 541  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 541  
 Leu Asn Ala Leu Gly Leu Phe Pro Pro Thr Ser Gly Met Pro Pro Pro  
 1 5 10 15  
 Thr Ser Gly Pro  
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<210> 542  
 <211> 20  
 <212> PRT  
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<400> 542  
 Ser Gly Met Pro Pro Pro Thr Ser Gly Pro Pro Ser Ala Met Thr Pro  
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 Pro Tyr Pro Gln  
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<210> 543  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 543  
 Pro Ser Ala Met Thr Pro Pro Tyr Pro Gln Phe Glu Gln Ser Glu Thr  
 1 5 10 15  
 Glu Thr Val His Leu Phe Ile  
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<210> 544  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 544  
 Phe Glu Gln Ser Glu Thr Glu Thr Val His Leu Phe Ile Pro Ala Leu  
 1 5 10 15

Ser Val Gly Ala  
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<210> 545  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 545  
Leu Phe Ile Pro Ala Leu Ser Val Gly Ala Ile Ile Gly Lys Gln Gly  
1 5 10 15  
Gln His Ile Lys  
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<210> 546  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 546  
Ile Ile Gly Lys Gln Gly Gln His Ile Lys Gln Leu Ser Arg Phe Ala  
1 5 10 15  
Gly Ala Ser Ile  
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<210> 547  
<211> 21  
<212> PRT  
<213> Homo sapiens

<400> 547  
Lys Gln Leu Ser Arg Phe Ala Gly Ala Ser Ile Lys Ile Ala Pro Ala  
1 5 10 15  
Glu Ala Pro Asp Ala  
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<210> 548  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 548  
Lys Ile Ala Pro Ala Glu Ala Pro Asp Ala Lys Val Arg Met Val Ile  
1 5 10 15  
Ile Thr Gly Pro  
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<210> 549  
<211> 20

<212> PRT  
 <213> Homo sapiens

<400> 549  
 Lys Val Arg Met Val Ile Ile Thr Gly Pro Pro Glu Ala Gln Phe Lys  
 1 5 10 15  
 Ala Gln Gly Arg  
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<210> 550  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 550  
 Pro Glu Ala Gln Phe Lys Ala Gln Gly Arg Ile Tyr Gly Lys Ile Lys  
 1 5 10 15  
 Glu Glu Asn Phe  
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<210> 551  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 551  
 Ile Tyr Gly Lys Ile Lys Glu Glu Asn Phe Val Ser Pro Lys Glu Glu  
 1 5 10 15  
 Val Lys Leu Glu  
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<210> 552  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 552  
 Val Ser Pro Lys Glu Glu Val Lys Leu Glu Ala His Ile Arg Val Pro  
 1 5 10 15  
 Ser Phe Ala Ala  
 20

<210> 553  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 553  
 Ala His Ile Arg Val Pro Ser Phe Ala Ala Gly Arg Val Ile Gly Lys  
 1 5 10 15

Gly Gly Lys Thr  
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<210> 554  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 554  
Gly Arg Val Ile Gly Lys Gly Gly Lys Thr Val Asn Glu Leu Gln Asn  
1 5 10 15  
Leu Ser Ser Ala  
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<210> 555  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 555  
Val Asn Glu Leu Gln Asn Leu Ser Ser Ala Glu Val Val Val Pro Arg  
1 5 10 15  
Asp Gln Thr Pro  
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<210> 556  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 556  
Glu Val Val Val Pro Arg Asp Gln Thr Pro Asp Glu Asn Asp Gln Val  
1 5 10 15  
Val Val Lys Ile  
20

<210> 557  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 557  
Asp Glu Asn Asp Gln Val Val Val Lys Ile Thr Gly His Phe Tyr Ala  
1 5 10 15  
Cys Gln Val Ala  
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<210> 558  
<211> 20

<212> PRT  
 <213> Homo sapiens

<400> 558  
 Thr Gly His Phe Tyr Ala Cys Gln Val Ala Gln Arg Lys Ile Gln Glu  
 1 5 10 15  
 Ile Leu Thr Gln  
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<210> 559  
 <211> 21  
 <212> PRT  
 <213> Homo sapiens

<400> 559  
 Ala Gln Arg Lys Ile Gln Glu Ile Leu Thr Gln Val Lys Gln His Gln  
 1 5 10 15  
 Gln Gln Lys Ala Leu  
 20

<210> 560  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 560  
 Val Lys Gln His Gln Gln Gln Lys Ala Leu Gln Ser Gly Pro Pro Gln  
 1 5 10 15  
 Ser Arg Arg Lys  
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<210> 561  
 <211> 942  
 <212> PRT  
 <213> Mus musculus

<400> 561  
 Met Thr His Arg Asp Ser Thr Gly Pro Val Ile Gly Leu Lys Leu Val  
 1 5 10 15  
 Thr Leu Leu Phe Thr Leu Ser Pro Glu Leu Leu Phe Leu Gly Ala Gly  
 20 25 30  
 Leu Lys Leu Lys Glu Asn Gly Tyr Asp Gly Leu Leu Val Ala Ile Asn  
 35 40 45  
 Pro Arg Val Pro Glu Asp Leu Lys Leu Ile Thr Asn Ile Lys Glu Met  
 50 55 60  
 Ile Thr Glu Ala Ser Phe Tyr Leu Phe Asn Ala Thr Lys Arg Arg Val  
 65 70 75 80  
 Phe Phe Arg Asn Val Gln Ile Leu Val Pro Ala Thr Trp Thr Asp His  
 85 90 95  
 Asn Tyr Ser Arg Val Arg Gln Glu Ser Tyr Asp Lys Ala Asn Val Ile

			100					105				110					
Val	Ala	Glu	Gln	Ser	Glu	Glu	His	Gly	Asp	Asp	Pro	Tyr	Thr	Leu	Gln		
		115					120					125					
His	Arg	Gly	Cys	Gly	Gln	Glu	Gly	Arg	Tyr	Ile	His	Phe	Thr	Pro	Ser		
	130						135				140						
Phe	Leu	Leu	Asn	Asp	Glu	Leu	Ala	Ala	Gly	Tyr	Gly	Ala	Arg	Gly	Arg		
145					150					155					160		
Val	Phe	Val	His	Glu	Trp	Ala	His	Leu	Arg	Trp	Gly	Val	Phe	Asp	Glu		
			165						170					175			
Tyr	Asn	Asn	Asp	Lys	Pro	Phe	Tyr	Val	Asn	Gly	Arg	Asn	Glu	Ile	Gln		
		180						185					190				
Val	Thr	Arg	Cys	Ser	Ser	Asp	Ile	Thr	Gly	Val	Phe	Val	Cys	Glu	Lys		
	195						200					205					
Gly	Leu	Cys	Pro	His	Glu	Asp	Cys	Ile	Ile	Ser	Lys	Ile	Phe	Arg	Glu		
	210					215					220						
Gly	Cys	Thr	Phe	Leu	Tyr	Asn	Ser	Thr	Gln	Asn	Ala	Thr	Gly	Ser	Ile		
225					230					235					240		
Met	Phe	Met	Pro	Ser	Leu	Pro	Ser	Val	Val	Glu	Phe	Cys	Asn	Glu	Ser		
			245					250						255			
Thr	His	Asn	Gln	Glu	Ala	Pro	Asn	Leu	Gln	Asn	Gln	Val	Cys	Ser	Leu		
		260						265					270				
Arg	Ser	Thr	Trp	Asp	Val	Ile	Thr	Ala	Ser	Ser	Asp	Leu	Asn	His	Ser		
	275						280					285					
Leu	Pro	Val	His	Gly	Val	Gly	Leu	Pro	Ala	Pro	Pro	Thr	Phe	Ser	Leu		
	290					295					300						
Leu	Gln	Ala	Gly	Asp	Arg	Val	Val	Cys	Leu	Val	Ile	Asp	Val	Ser	Arg		
305					310				315						320		
Lys	Met	Ala	Glu	Gly	Asp	Arg	Leu	Leu	Arg	Leu	Gln	Gln	Ala	Ala	Glu		
			325						330					335			
Leu	Tyr	Leu	Met	Gln	Val	Val	Glu	Ala	His	Thr	Phe	Val	Gly	Ile	Val		
		340						345					350				
Thr	Phe	Asp	Ser	Lys	Gly	Glu	Ile	Arg	Ala	Ser	Leu	Gln	Gln	Ile	Tyr		
	355						360					365					
Ser	Asp	Asp	Asp	Arg	Lys	Leu	Leu	Val	Ser	Tyr	Leu	Pro	Thr	Ala	Val		
	370					375					380						
Ser	Thr	Asp	Ala	Glu	Thr	Asn	Ile	Cys	Ala	Gly	Val	Lys	Lys	Gly	Phe		
385					390					395					400		
Glu	Val	Val	Glu	Glu	Arg	Asn	Gly	Arg	Ala	Asp	Gly	Ser	Val	Leu	Ile		
			405						410					415			
Leu	Val	Thr	Ser	Gly	Ala	Asp	Glu	His	Ile	Ala	Asn	Cys	Leu	Leu	Thr		
		420						425					430				
Ser	Met	Asn	Ser	Gly	Ser	Thr	Ile	His	Ser	Met	Ala	Leu	Gly	Ser	Ser		
	435					440						445					
Ala	Ala	Arg	Lys	Val	Gly	Glu	Leu	Ser	Arg	Leu	Thr	Gly	Gly	Leu	Lys		
	450					455					460						
Phe	Phe	Ile	Pro	Asp	Lys	Phe	Thr	Ser	Asn	Gly	Met	Thr	Glu	Ala	Phe		
465					470					475					480		
Val	Arg	Ile	Ser	Ser	Gly	Thr	Gly	Asp	Ile	Phe	Gln	Gln	Ser	Leu	Gln		
			485					490						495			
Val	Glu	Ser	Val	Cys	Glu	Thr	Val	Gln	Pro	Gln	His	Gln	Leu	Ala	Asp		
		500						505					510				
Thr	Met	Thr	Val	Asp	Ser	Ala	Val	Gly	Asn	Asp	Thr	Leu	Phe	Leu	Val		
	515						520					525					
Thr	Trp	Gln	Thr	Gly	Gly	Pro	Pro	Glu	Ile	Ala	Leu	Leu	Asp	Pro	Ser		

530		535		540
Gly Arg Lys Tyr Asn Thr	Gly Asp Phe Ile Ile Asn Leu Ala Phe Arg			
545	550	555	560	
Thr Ala Ser Leu Lys Ile	Pro Gly Thr Ala Lys His Gly His Trp Thr			
	565	570	575	
Tyr Thr Leu Asn Asn Thr	His His Ser Pro Gln Ala Leu Lys Val Thr			
	580	585	590	
Val Ala Ser Arg Ala Ser	Ser Leu Ala Met Ser Pro Ala Thr Leu Glu			
	595	600	605	
Ala Phe Val Glu Arg Asp	Ser Thr Tyr Phe Pro Gln Pro Val Ile Ile			
	610	615	620	
Tyr Ala Asn Val Arg Lys	Gly Leu His Pro Ile Leu Asn Ala Thr Val			
625	630	635	640	
Val Ala Thr Val Glu Pro	Glu Ala Gly Asp Pro Val Val Leu Gln Leu			
	645	650	655	
Leu Asp Gly Gly Ala Gly	Ala Asp Val Ile Arg Asn Asp Gly Ile Tyr			
	660	665	670	
Ser Arg Tyr Phe Ser Ser	Phe Ala Val Ser Gly Ser Tyr Ser Leu Thr			
	675	680	685	
Val His Val Arg His Ser	Pro Ser Thr Ser Thr Leu Ala Leu Pro Val			
	690	695	700	
Pro Gly Asn His Ala Met	Tyr Val Pro Gly Tyr Ile Thr Asn Asp Asn			
705	710	715	720	
Ile Gln Met Asn Ala Pro	Lys Asn Leu Gly His Arg Pro Val Lys Glu			
	725	730	735	
Arg Trp Gly Phe Ser Arg	Val Ser Ser Gly Gly Ser Phe Ser Val Leu			
	740	745	750	
Gly Val Pro Asp Gly Pro	His Pro Asp Met Phe Pro Pro Cys Lys Ile			
	755	760	765	
Thr Asp Leu Glu Ala Met	Lys Val Glu Asp Asp Val Val Leu Ser Trp			
	770	775	780	
Thr Ala Pro Gly Glu Asp	Phe Asp Gln Gly Gln Thr Thr Ser Tyr Glu			
785	790	795	800	
Ile Arg Met Ser Arg Ser	Leu Trp Asn Ile Arg Asp Asp Phe Asp Asn			
	805	810	815	
Ala Ile Leu Val Asn Ser	Ser Glu Leu Val Pro Gln His Ala Gly Thr			
	820	825	830	
Arg Glu Thr Phe Thr Phe	Ser Pro Lys Leu Val Thr His Glu Leu Asp			
	835	840	845	
His Glu Leu Ala Glu Asp	Ala Gln Glu Pro Tyr Ile Val Tyr Val Ala			
	850	855	860	
Leu Arg Ala Met Asp Arg	Ser Ser Leu Arg Ser Ala Val Ser Asn Ile			
865	870	875	880	
Ala Leu Val Ser Met Ser	Leu Pro Pro Asn Ser Ser Pro Val Val Ser			
	885	890	895	
Arg Asp Asp Leu Ile Leu	Lys Gly Val Leu Thr Thr Val Gly Leu Ile			
	900	905	910	
Ala Ile Leu Cys Leu Ile	Met Val Val Ala His Cys Ile Phe Asn Arg			
	915	920	925	
Lys Lys Arg Pro Ser Arg	Lys Glu Asn Glu Thr Lys Phe Leu			
	930	935	940	

<211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 562  
 Glu Gly Lys Tyr Ile His Phe Thr Pro Asn Phe Leu Leu Asn Asp Asn  
 1 5 10 15  
 Leu Thr Ala Gly  
 20

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